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**L I S T**  
**OF THE**  
**S P E C I M E N S**  
**OF**  
**LEPIDOPTEROUS INSECTS**  
**IN**  
**THE COLLECTION**  
**OF THE**  
**BRITISH MUSEUM** *Nat. Hist.*  
*Dept. of zoology.*  
**BY**  
**FRANCIS WALKER, F.L.S., &c.**

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**PART XX.—GEOMETRITES.**

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## P R E F A C E .

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THE object of the present Catalogue is to give a complete list of all the genera and species of Geometrites known to exist in the different collections. The letters *a, b, c*, &c., after the species, denote the specimens now contained in the British Museum, followed by the *habitat* and the mode in which each of them was obtained, and the absence of these letters indicates the species which are desiderata, and therefore desirable to be procured for the collection.

JOHN EDWARD GRAY.

British Museum,

March 1, 1860.



# CATALOGUE

OF

## LEPIDOPTERA HETEROCERA.

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### FIFTH SERIES.

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#### Tribe 10. GEOMETRITES.

Corpus sæpissime gracile. Ocelli nulli. Proboscis longitudine varia, sæpissime tenuis et divisa. Palpi graciles, raro longissimi. Palpi maxillares obsoleti. Antennæ variæ, graciles, nunquam nodosæ. Thorax brevissimus, sæpissime rotundatus, non cristatus; tegulæ breves. Abdomen maris vix unquam crassum, non cristatum. Pedes longi, glabri aut subpilosi; tibiæ posticæ sæpe incrassatæ. Alæ amplæ, tenues, sæpe concolores liturisque non diversis.

*Geometræ*, *Boisd.*; *Agassiz*.

*Geometrida*, *Leach*.

*Geometridæ*, *Steph*.

*Geometrites*, *Newm*.

*Phalénites*, *Guén*.

*Geometrina*, *Stainton*.

Body very generally slender. Ocelli wanting. Proboscis variable as to length, almost always slight and divided. Palpi slender, rarely very long. Maxillary palpi obsolete. Antennæ variable, slender, never nodose. Thorax very short, generally rounded, not crested; tegulæ short. Abdomen of the male almost

always slender, not crested. Legs long, smooth or slightly pilose; hind tibiæ often thickened; spurs four, with very few exceptions. Wings ample, slight, delicate, generally expanded in repose, braced together by a bristle, not folded. Hind wings often alike in colour to the fore wings and with like markings. Larva looped while walking; three first pairs of membranous legs almost always wanting, and in all cases shorter than the others. Pupa smooth; abdominal segments free.

In Guenée's 'Histoire Naturelle des Insectes Lépidoptères' the Geometrites are preceded by *Urania* and *Coronis* and their allies, which have been described in the first series of this Catalogue. The genus *Hazis*, of which he forms the family *Hazidæ* and includes with the *Geometrites*, is also mentioned in that series.

A. Alæ anticæ semper acuminatæ; posticæ sæpissime caudatæ.

Fam. 1. URAPTERYDÆ, Guen.

B. Alæ posticæ margine exteriore medio non angulato-caudato.

A. Corpus valde robustum. - Fam. 3. CENOCHROMIDÆ, Guen.

B. Corpus non valde robustum.

A. Proboscis conspicua.

a. Alæ anticæ litura nulla semihyalina.

i. Abdomen non bicolor.

\* Antennæ fœminæ non pectinatæ.

† Palpi vix conspicui.

Fam. 4. AMPHIDASPIDÆ, Guen.

†† Palpi conspicui.

‡ Corpus non gracillimum.

§ Frons non valde angusta.

× Alæ angulosæ.

0 Caput valde convexum, apud antenas villosum.

Fam. 2. ENNOMIDÆ, Guen.

00 Caput non valde convexum.

Fam. 14. MACARIDÆ, Guen.

×× Alæ non angulosæ.

0 Alæ dentatæ.

Fam. 5. BOARMIDÆ, Guen.

00 Alæ non dentatæ.

→ Alæ sæpissime virides.

Fam. 7. GEOMETRIDÆ, Guen.

→→ Alæ sæpissime non virides.

++ Pedes non longissimi.



- ☞ Palpi rostriformes et compressi.
  - Antennæ sæpissime pectinatæ aut plumosæ.
    - Fam. 15. FIDONIDÆ, *Guen.*
  - = Antennæ sæpissime non pectinatæ, nunquam plumosæ.
    - Fam. 19. LARENTIDÆ, *Gn.*
- ☞ Palpi non rostriformes et compressi.
  - . Frons rugosa.
    - Fm. 6. BOLETOBIDÆ, *Gn.*
  - .. Frons non rugosa.
    - Alæ posticæ apud angulum anteriorem non productæ.
      - || Pedes robusti aut sat robusti
        - . Frons porrecta.
          - Fam. 17. LIGIDÆ, *Gn.*
        - .. Frons non porrecta.
          - Fam. 20. EUBOLIDÆ, *Gn.*
      - ||| Pedes non robusti.
        - Pedes breves.
          - Fm. 16. ZERRENIDÆ, *Gn.*
        - Pedes non breves.
    - ☞ Palpi bene determinati.
      - + Tibiæ posticæ bicalcaratæ.
        - Fam. 10. EPHYRIDÆ, *Gn.*
      - ++ Tibiæ posticæ quadricarcatæ.
        - Fam. 13. CABERIDÆ, *Gn.*
    - ☞ Palpi non bene determinati.
      - Fam. 11. ACIDALIDÆ, *Gn.*
      - = Alæ posticæ apud angulum anteriorem productæ.
        - Fam. 21. SIONIDÆ, *Gn.*
    - ++++ Pedes longissimi.
      - ☞ Alæ sæpissime lineis metallicis.
        - Fam. 9. PALLYADÆ, *Gn.*
      - ☞ Alæ lineis nullis metallicis.
        - Fam. 8. MECOCERIDÆ, *Gn.*
    - §§ Frons valde angusta.
      - Fam. 12. MICRONIDÆ, *Gn.*
    - ++ Corpus gracillimum.
      - Fam. 22. HEDYLIDÆ, *Gn.*

**\*\* Antennæ fœminæ pectinatæ.**

Fam. 25. *HYPOCHROSIDÆ*, Gn.

ii. Abdomen bicolor. -

Fam. 24. *EMPLOCIDÆ*, Gn.

b. Alæ anticæ litura semihyalina.

Fam. 23. *ERATEINIDÆ*, Gn.

B. Proboscis nulla aut vix conspicua.

Fam. 18. *HYBÈRNIDÆ*, Gn.

### Fam. 1. *URAPTERYDÆ*.

Frons plana, non fasciculata. Proboscis longa, robusta, basi non squamosa. Palpi breves, validi, ascendentes, squamoso-hirsuti, apice contigui; articulus 3us brevissimus. Antennæ mediocres, cylindricæ, supra squamosæ, subtus pubescentes. Thorax robustus, subvillosus. Abdomen glabrum, sat validum. Pedes robusti, non longissimi; tarsi subspinosi. Alæ amplæ, velutinæ, concolores, lituris non diversis, fimbria brevi; anticæ trigonæ, acutæ; posticæ breviores, sæpe caudatæ. *Mas.*—Abdomen fasciculo apicali truncato. Tibiæ posticæ incrassatæ. *Fœm.*—Abdomen apice acutum, abruptum.

*Urapterydæ*, *Guen. Phal.* i. 26.

*Ourapterydæ*, *Staint. Man.* ii. 4.

Front flat, without a tuft. Proboscis long, robust, not squamous at the base. Palpi short, stout, ascending, squamous-hirsute, conniving at the tips; third joint very short, button-shaped. Antennæ moderately long, cylindrical, squamous above, villose or pubescent beneath. Thorax robust, slightly villose. Abdomen rather stout, smooth, terminated by a truncated tuft in the male, and by an abrupt and acute tip in the female. Legs robust, moderately long; hind tibiæ always thickened in the male; tarsi armed with small spines. Wings ample, velvety, alike in colour and with like markings; fringe short. Fore wings triangular, acute; subcostal veinlets approximate to the costa; costal and subcostal veins anchylosed; areolet very long, very narrow, in some cases open at the tip; first superior vein or independent vein inserted in the middle of the discal areolet. Hind wings shorter, often furnished with a tail-like angle in the middle of the hind border; costal vein free, extending alongside of the subcostal vein, but never beyond the fork; independent vein wanting; internal vein short, very near the border. Larva living on trees, much elongated, furnished with protuberances, especially on the eighth segment. Pupa oblong, with the fore part cylindrical, in a loose net-like cocoon suspended to leaves.

- A. Palpi articulo 3o indistincto.
- A. Alæ non dentatæ.
- a. Corpus non valde robustum.
- a. Frons non porrecta.
- i. Antennæ non robustæ.
- \* Alæ posticæ angulatæ.
- † Alæ strigatæ.
- ‡ Alæ non nebulosæ. - 1. URAPTERYX, *Leach.* 5
- ‡‡ Alæ nebulosæ.
- § Alæ anticæ non elongatæ.
10. CLYSIA, *Guen.*
- §§ Alæ anticæ elongatæ. 14. LAGYRA, *Walk.* 58
- †† Alæ linea obliqua conspicua.
8. MUCRONODES, *Guen.*
- \*\* Alæ posticæ non angulatæ. - 9. CIMICODES, *Guen.*
- ii. Antennæ robustæ. - - - 4. IDIODES, *Guen.*
- b. Frons porrecta. - - - 2. RIPULA, *Guen.*
- a. Corpus valde robustum. - - - 5. CIRRODES, *Guen.*
- B. Alæ dentatæ. - - - 7. EUTRAPELA, *Hübner.*
- B. Palpi articulo 3o distincto.
- A. Palpi robusti.
- a. Tibiæ posticæ longæ. - - - 3. CHÆRODES, *Guen.*
- a. Tibiæ posticæ non longæ. - - - 11. OXYDIA, *Guen.*
- B. Palpi graciles. - - - 12. CYCLIDIA, *Guen.* 55
- C. Palpi articulo 3o valde distincto.
- A. Corpus sat robustum. - - - 6. SABULODES, *Guen.*
- B. Corpus gracile. - - - 13. ANDANIA, *Walk.*

## Genus 1. URAPTERYX.

Corpus sat gracile. Palpi breves, subrecti, concolores; articulus 3us vix distinctus. Antennæ graciles, supra squamosæ, maris albis velutinæ aut pubescentes. Pedes longi, glabri, sat validi; tibiæ posticæ calcaribus quatuor parvis. Alæ amplæ, sericæ, plus minusve strigatæ; anticæ trigonæ, acutæ; posticæ quadrangulatæ, ciliatæ.

*Urapteryx*, *Leach*, *Zool. Misc.* 80; *Steph.*; *Boisd.*; *Dup.*; *Herr.-Schaff.*; *Lederer*; *Guen. Phal.* i. 27; *Staint.*

*Asena*, *Treit.*

*Therisia*, p., *Eulepidotis*, p., et *Calospilos*, p., *Hübner. Verz. Schm.* 290, 291, 305.

Body moderately slender. Palpi short, nearly straight, alike in colour; third joint indistinct. Antennæ slender, squamous above, velvety or pubescent beneath in the male. Legs long, smooth, rather stout; hind tibiæ with four short spurs. Wings ample, sericeous, with more or less streaks. Fore wings acute, triangular. Hind wings quadrangular, extending beyond the abdomen; exterior border forming a caudiform angle.

## Europe.

### 1. URAPTERYX SAMBUCARIA.

*Flava; caput antice fuscum; alæ strigulis paucis transversis olivaceis, linea interiore subochracea; anticæ linea exteriori subochracea; posticæ fimbria ex parte ochracea, lituris duabus apud angulum, 1a rufa, 2a nigra.*

- , *Göed. Ins.* ii. pl. 34. *List, Göed.* f. 10. *Petiv. Gazoph.* pl. 51, f. 6. *Rai, Ins.* 177, 1. *Albin, Ins.* pl. 94. *Roës. Ins.* i. *Phal.* 3, pl. 6. *Geoff. Ins.* ii. 138, 58. *Wilk.* pl. 78. *Clerck, Icon.* pl. 50, f. 2. *Deg. Ins.* ii. 1, 447, 3. *Schæff. Icon.* pl. 93, f. 8. *Sepp. Ins.* i. 6, 3, pl. 1. *DeVill. Ent. Linn.* ii. 293, 404.
- Phalæna-Geometra Sambucaria, Linn. Syst. Nat.* i. 2, 860, 203; *Faun. Suec.* 1222; *Mus. Lud. Ulr.* 391. *Fabr. Sp. Ins.* ii. 243, 12; *Mant. Ins.* ii. 186, 16; *Ent. Syst.* iii. 2, 134, 19. *Wien. Verz.* 103, 1. *Gmel. ed. Syst. Nat.* i. 5, 2449, 203. *Brahm, Ins.* ii. 1, 351, 234. *Bork. Eur. Schm.* v. 80, 37. *Esp. Schmett.* v. 51, pl. 8, f. 1—8. *Ill. N. Ausg. dess.* i. 398, 1. *Fuessl. Schw. Ins.* 39, 754. *Schr. Faun. Boic.* ii. 2, 11, 1622. *Gotze, Ent. Beytr.* iii. 3, 285, 203. *Müll. Zool. Dan. Prodr.* 125, 1435. *Lang. Verz.* ii. 167, 1167. *Hübner. Geom.* pl. 6, f. 28. *Haw. Lep.* 297.
- Therinia sambucaria, Hübn. Verz. Schm.* 290, 2820.
- Urapteryx sambucaria, Leach, Zool. Misc.* 80, pl. 35, f. 2. *Steph. Ins. Brit. Haust.* iii. 175. *Dup. Léop.* v. 199, pl. 184. *Curt Brit. Ent.* pl. 508. *Boisd. Ind. Méth.* 182, 1435. *Herr.-Sch. Eur. Schm.* iii. 54, 141. *Staint. Man.* ii. 4.
- Acaena sambucaria, Treit. Schm.* vi. 1, 85, 1.
- a. England. Presented by Edwin Shepherd, Esq.  
b—n. England. From Mr. Stephens' collection.  
o—p. England.  
q—v. Europe. From M. Becker's collection.  
u. France.  
w. ———? Presented by E. Doubleday, Esq.  
x. ———?

## Mexico.

The three following species, of which the two latter may be varieties of *U. Politia*, differ much from the typical form of *Urapteryx*, and may form a new genus between it and *Charodes*. *U. Politia* varies in the markings of the wings and in the caudal angle of the hind wings, and some of the specimens here recorded have less likeness to the typical specific form than to *U. complicata*.

## 2. URAPTERYX POLITIA.

*Lutea aut flava; alæ rufescente punctatæ, fascia exteriorè obliqua rufescente antice abbreviata postice diffusa; antica apice rotundata, maculis duabus exterioribus rufescentibus, una costali sat magna, altera mediocri apud marginem interiorem; postica subquadrata, subcaudata.*

*Phalæna Politia*, Cram. Pap. Exot. ii. 65, pl. 140, f. E.

*Phalæna-Geometra politata*, Fabr. Sp. Ins. ii. 253, 64; Mant. Ins. ii. 196, 100; Ent. Syst. iii. 2, 163, 123. Gmel. ed. Syst. Nat. i. 5, 2452, 614.

*Eulepidotis Politaria*, Hübn. Verz. Schm. 291, 2822.

*Urapteryx Politia*, Leach, Zool. Misc. 80, pl. 35, f. 1.

*Urapteryx Politata*, Guen. Phal. i. 30, 2.

Surinam. Cayenne. Brazil.

a, b. St. Domingo. From Mr. Tweedie's collection.

c. Jamaica. From Mr. Gosse's collection.

d. West Coast of America. Presented by Capt. Kellett and Lieut. Wood.

e. Quito. Presented by M. Bourcier.

f. Dajaca, Mexico. From M. Sallé's collection.

g, h. ———? From Mr. Milne's collection.

i. ———?

## West Indies.

## 3. URAPTERYX COMPLICATA.

*Lutea; alæ rufescente strigatæ, fascia exteriorè rufescente; antica macula costali subapicali; postica gutta apud angulum marginalem.*

*Urapteryx complicata*, Guen. Phal. i. 30, 3, pl. 6, f. 9.

Haiti.

## 4. URAPTERYX ILLITURATA.

*Pallide flava, U. complicatæ simillima; alæ ferrugineo conspersæ; anticæ macula costali parva bilobata: posticæ linea rufa, angulo marginali innotato.*

*Urapteryx illiturata, Guen. Phal. i. 30, 4.*

Cuba.

## 5. URAPTERYX FLAVIFIMBRIA.

*Fœm. Candida, sat gracilis; caput rufescente-ferrugineum; palpi graciles, breves; tibiæ anticæ ferrugineo notatæ; alæ lineis duabus rectis valde indistinctis fimbriaque pallide flavis; anticæ acutæ, litura costali apicali cervina, margine posteriore recto; posticæ subcaudatæ, abdomen longe superantes, puncto apud marginem interiorem fusco.*

*Female.* Pure white, rather slender. Head and palpi reddish, ferruginous above; the latter short, slender, not rising higher than the vertex; third joint conical, acute. Antennæ slender. Legs slender; fore legs partly testaceous, their tibiæ with ferruginous marks. Wings with two straight very indistinct pale yellow lines; fringe pale yellow. Fore wings acute; costa with a slender fawn-coloured mark at its tip; exterior border quite straight. Hind wings extending far beyond the abdomen, forming an acute angle or short tail in the middle of the exterior border; a brown point on the interior border at the end of the inner line. Length of the body 6 lines; of the wings 10 lines.

*a. Jamaica. From Mr. Gosse's collection.*

## South America.

## A. Alæ sulphureo-albidæ.

*A. Alæ anticæ quadrilineatæ. - - - tesserata, Guen.*

*B. Alæ anticæ bilineatæ. - - - breviaria, Hübn.*

## B. Alæ albæ.

*A. Alæ fusco lineatæ. - - - Platinata, Guen.*

*B. Alæ luteo lineatæ.*

*a. Alæ posticæ nigro maculatæ. - Saturniaria, Herr.-Sch.*

*b. Alæ posticæ nigro non notatæ. - - Area, Cram.*

## 6. URAPTERYX TESSERATA.

**MA.** *Sulphureo-albida; frons fuscescens; alæ anticæ lineis atomis fimbriaque pallidissime fuscis; anticæ lineis quatuor rectis; posticæ lineis tribus, 2a 3aque deviis, cauda brevissima valde obtusa fusco notata.*

*Uapteryx tesserata, Guen. Phal. i. 32, 9.*

**Brazil.**

## 7. URAPTERYX BREVIARIA.

*Sulphureo-albida; alæ linea recta obliqua, punctis exterioribus fimbriaque fuscis; anticæ linea interiore non obliqua lituraque discali fuscis; posticæ margine exteriori apud medium angulato.*

*Therinia brevitaria, Hübn. Zutr. 40, 299, f. 597, 598.*

*Uapteryx brevitaria, Guen. Phal. i. 33, 10.*

**Rio Janeiro.**

## 8. URAPTERYX PLATINATA.

**Fem.** *Alba; alæ anticæ trigonæ, lineis sex obliquis rectis fuscis, quatuor interioribus bene determinatis argenteo squamosis; posticæ subcaudatæ, non dentatæ, angulo caudali flavescente argenteo strigata cinereo fuscoque notata, gutta marginali fusca argenteo marginata.*

*Uapteryx Platinata, Guen. Phal. i. 33, 11.*

**Brazil.**

## 9. URAPTERYX SATURNIARIA.

*Alba; alæ anticæ trigonæ, lineis quatuor luteis, 3a, 4aque postice approximatis, linea marginali nigricante; posticæ subcaudatæ, hinc duabus pallidioribus antice connexis guttamque argenteam includentibus, maculis tribus adhuc exterioribus nigris.*

*Uapteryx Saturniaria, Herr.-Sch. Exot. Schm. f. 414. Guen. Phal. i. 33, 12.*

**Venezuela.**

## 10. URAPTERYX AREA.

*Alba* ; *alæ anticæ oblongæ, litura costali subapicali fusca, strigis duabus luteis parallelis apud angulum interiorem* ; *posticæ subcaudatæ, lineis quatuor exterioribus parallelis luteis.*

Phalæna-Geometra Area, *Cram. Pap. Exot.* i. 88, pl. 56, f. D.

Phalæna-Geometra areata, *Fabr. Sp. Ins.* ii. 256, 83 ; *Mant. Ins.* ii. 199, 125 ; *Ent. Syst.* iii. 2, 172, 155. *Gmel. ed. Syst. Nat.* i. 5, 2456, 639.

Calospilos Arearia, *Hübner. Verz. Schm.* 305, 2942.

Urapteryx Areata, *Guen. Phal.* i. 34, 13.

Surinam.

## Asia.

The Asiatic species of this genus will form two divisions ; the second belonging to the European group ; the first very distinct on account of the development of the palpi and of the ciliated and almost pectinated antennæ of the male.

## Group 1.

## 11. URAPTERYX CROCOPTERATA.

*Lutea* ; *caput, thorax antice costaque albida cinereo punctata* ; *alæ croceo strigatæ, nonnunquam cinereo plus minusve suffusæ* ; *anticæ acutæ, lineis duabus rectis strigæque subcostali cinereis, linea submarginali antice angulata* ; *posticæ angulatæ et caudatæ, linea submarginali angulata bene determinata, litura discali, lineolis duabus caudalibus nigris.*

Urapteryx crocopterata, *Koll. Von Hug. Reis. Kaschm.* 483. *Guen. Phal.* i. 29, 1.

*a.* Himalaya Mountains. Presented by the Entomological Club.

*b—h.* Hindostan. From the Entomological Society's collection.

*i.* Nepaul. Presented by Major-General Hardwicke.

*j—n.* Silhet. From the Rev. J. Stainforth's collection.

*o—r.* North Hindostan. Presented by E. Doubleday, Esq.

*s.* Silhet.

*t.* North China. From Mr. Fortune's collection.



## 12. URAPTERYX COLUMBICOLA.

**Ma.** *Pallide purpurascens-cinerea; palpi porrecti, caput superantes, articulo 3o parvo; antennæ setulosæ; pedes fusco conspersi, tibiis posticis tumidis; alæ strigulis transversis indistinctis fusciscent-cinereis, puncto discali nigricante, fascia subtus submarginali interrupta vaga nigricante, fimbria alba; antice subfalcata, plaga discali exteriori informi flava semihyalina, costa valde convexa, margine exteriori recto sat obliquo, macula subtus nigra; postice abdomen longe superantes, caudis acutis fusco alboque notatis.*

**Male.** Pale dove-coloured cinereous, whitish beneath. Palpi porrect, extending somewhat beyond the head; third joint conical, about one-fourth of the length of the second. Joints of the antennæ with tufts of hairs on each side. Legs speckled with brown; hind tibiæ somewhat tumid. Wings with minute and indistinct transverse brownish cinereous streaks; discal point blackish; under side with a very irregular and incomplete submarginal blackish band; fringe white. Fore wings subfalcate, with an exterior discal irregular yellow semihyaline patch, which has a small spot of the same hue near its fore end; costa very convex; exterior border quite straight, rather oblique; under side with a black spot near the middle of the interior border. Hind wings extending very far beyond the abdomen, with a diffuse fawn-coloured tinge about the middle of the exterior border; tail acute, distinctly formed, having a little brown white-bordered streak on its hind side. Length of the body 8 lines; of the wings 24 lines.

**Hindostan?** Presented by E. Doubleday, Esq.

A larger specimen of this species with the vitreous mark in the fore wings more developed and of a different shape is in the collection of Mr. Saunders, and was taken by Mr. Wallace at Sarawak, Borneo.

## Group 2.

## 13. URAPTERYX PERSICARIA.

*Urapteryx Persicaria*, Menetr. Cat. Rais. Boisd. Ind. Méth. 182, 1434. Guen. Phal. i. 32, 6.

**Caucasia.** Sarepta.

## 14. URAPTERYX EBULEATA.

*Alba, sulphureo vix tincta; frons alba; alæ fimbria lineisque duabus fusco-cinereis; antica fimbria rufescente, margine exteriori recto.*

*Urapteryx sambucata, var., Koll. Von Hug. Reis. Kasch. 483.*

*Urapteryx ebuleata, Guen. Phal. i. 32, 7.*

Bengal. Kaschmir.

## 15. URAPTERYX PODALIRIATA.

*Alba; alæ linea marginali ochracea, fimbria cinerea; antica subfalcata, costa nigro punctata, lineis quatuor obliquis testaceis, 2a postice valde abbreviata, 4a antice abbreviata; postica lineis duabus testaceis postice connexis, caudis longis basi cinereo lineolatis ochraceo guttatis.*

*Urapteryx Podaliriata, Guen. Phal. i. 32, 8.*

a. Hindostan. From Archdeacon Clerk's collection.

b, c. Silhet. From Mr. Sowerby's collection.

d. Silhet. Presented by E. Doubleday, Esq.

e. North Hindostan. From Mr. James' collection.

*Urapteryx Podaliriata* has a striking resemblance in the markings of the wings and in the structure of the hind wings to *Asthenia Podaliriaria* and to other species of *Asthenia*, which genus belongs to the *Liparidæ*.

## 16. URAPTERYX PICTICAUDATA.

*Mas. Flavescente-alba; caput supra fuscum; pedes antici nigro conspersi; tibiæ posticæ incrassatæ; alæ lineis duabus rectis cervinis postice approximatis, fimbria rufa basi nigra; antica subfalcata, linea intermedia abbreviata, strigis nonnullis cervinis, costa nigro lineolata; posticæ caudis parvis atro rufoque notatis, linea exteriori e strigis obliquis contiguis fuscis, strigulis transversis fuscis apud marginem interiorem.*

*Male.* Yellowish white. Head above and palpi brown. Antennæ rather stout. Fore tibiæ and fore tarsi black-speckled; hind tibiæ incrassated. Wings with two straight fawn-coloured lines, which converge hindward; fringe deep red, black at the base

Fore wings subfalcate, with a short line in front between the two entire lines; a few slender fawn-coloured streaks, which are mostly between the exterior line and the exterior border; costa with little transverse black lines. Hind wings with short tails, which are adorned at the base with a deep black red-marked spot and with a red black-marked spot, which is bordered by contiguous black streaks; second line composed of oblique contiguous brown streaks; some transverse brown streaks along the apical part of the interior border as far as the interior line. Length of the body 9 lines; of the wings 22 lines.

This species and *U. Podaliriata* differ widely from each other in the caudal part of the hind wings, but they nearly agree in all the other characters.

Saravak, Borneo. In Mr. Saunders' collection.

## Genus 2. RIPULA.

Corpus sat gracile. Frons porrecta. Proboscis brevis, robusta. Palpi bicolores, recti, non crassi, apice contigui; articuli indistincti. Antennæ maris ciliatæ et subpectinatæ, fœminæ setacæ. Alæ sericeæ, albæ, maculis sparsis, linea una undata dentata indistincta; antice margine exteriori angulato; posticæ subcaudatæ.

*Ripula*, Guen. *Phal.* i. 34.

Body rather slender. Front forming a squamous, porrect, rather prominent tongue. Proboscis short, robust. Palpi straight, not thick, of two colours, conniving at the tips; joints indistinct. Antennæ ciliated and slightly pectinated in the male, setaceous in the female. Wings sericeous, white, with some isolated spots, and with one indistinct undulating and dentate line. Fore wings with an angle on the exterior border. Hind wings with an acute and very short tail.

## Mexico.

### 1. RIPULA MAHOMETARIA.

*Alba; pedes anteriores lutei, nigro notati; alæ anticæ macula costali subapicali olivacea ex parte rufa nigro et argenteo strigata, gutta interiore subcostali lutea, fascia postica brevi arcuata olivacea; posticæ lineis exterioribus interruptis cineris ex parte lutescentibus nigroque punctatis.*

*Urapteryx Mahometaria*, *Herr.-Sch. Exot. Schm.* f. 69, 70.

*Ripula Mahometaria*, *Guen. Phal.* i. 34, 14.

a. Mexico. Presented by E. Doubleday, Esq.

b. Oajaca, Mexico. From M. Sallé's collection.

c. Bolivia. From Mr. Bridges' collection.

d. ——— ?

## 2. RIPULA MEXICARIA.

*Alba*, *R. Mahometariæ simillima*; *alæ anticæ macula costali minore angustiore lituris diversis, macula postica angustiore pallidiore, linea intermedia e maculis cinereis albo notatis; pedes antici albi.*

*Ripula Mexicaria*, *Guen. Phal.* i. 35, 15.

*Ripula Mahometaria*, *var. ?*

Mexico.

## Genus 3. CHÆRODES.

Corpus sat validum. Palpi crassi, breves, concolores, subrecti, apice contigui; articuli distincti. Antennæ maris brevis sine et confertissime ciliatæ. Tibiæ posticæ longæ, maris inflatæ pilosæ. Alæ integræ, obscuræ, strigatæ, linea una obliqua; anticæ acutæ, margine exteriori recto aut angulato; posticæ quadrangulatæ, caudatæ.

*Chærodes*, *Guen. Phal.* i. 35.

Body moderately stout. Palpi stout, short, nearly straight, of one colour, conniving at the tips; joints distinct. Antennæ of the male with very short and thick-set ciliæ. Abdomen not extending so far as the hind wings. Hind tibiæ long, tumid and pilose in the male. Wings entire, dull-coloured, minutely streaked, with one oblique line. Fore wings acute; exterior border straight or angular; a black discal point, formed of erect hairs. Hind wings quadrangular, with an acute caudal angle.

## North America.

A. Alæ posticæ non dentatæ.

A. Alæ anticæ margine exteriori non angulato.

A. Alæ posticæ non caudatæ. - - - incurvata, *Guen.*

B. Alæ posticæ subcaudatæ. - - - transvertens, *Walk.*

**B. Alæ posticæ margine exteriori angulato.**A. Alæ linea submarginali diffusa. - transposita, *Walk.*

B. Alæ linea nulla submarginali.

a. Alæ posticæ angulo sat acuto.

i. Alæ fascia pallidiore. - transversata, *Drury.*ii. Alæ fascia nulla pallidiore. - transmutans, *Walk.*b. Alæ posticæ angulo valde obtuso. - contingens, *Walk.***B. Alæ posticæ dentatæ.**A. Alæ anticæ falcatæ. - transducens, *Walk.*B. Alæ anticæ valde falcatæ. - transferens, *Walk.***1. CHÆRODES INCURVATA.**

*Ochraceo-cervina ; alæ violaceo vix suffusæ, nigro sabulosæ, linea purpurascens recta obliqua albo punctata, lituris exterioribus obscurioribus angulatis, puncto discali interiore nigro ; anticæ acutæ, falcatæ ; posticæ angulatæ.*

*Chærodes incurvata*, *Guen. Phal. i. 37, 21, pl. 3, f. 2.*

North America.

4, 6. St. John's Bluff, East Florida. Presented by E. Doubleday, Esq.

**2. CHÆRODES TRANSPOSITA.**

*Pallide ochracea ; alæ strigulis plurimis transversis obscurioribus, subpurpurascens tinctæ, linea obliqua recta nigro-fusca extus subpurpurascens marginata costam versus angulata, linea exteriori angulosa valde diffusa fusca, puncto discali interiore nigro ; anticæ falcatæ, linea interiore undulata fusca, margine exteriori subangulato ; posticæ margine exteriori angulato subcaudato.*

*Chærodes transversata*, *Guen. Phal. i. 38, 22.*

4-j. New York. Presented by E. Doubleday, Esq.

4-o. Nova Scotia. From Lieut. Redman's collection.

The Nova Scotia specimens are somewhat paler than the others.

**3. CHÆRODES TRANSVERSATA.**

*Ochracea ; alæ vix strigatæ, subpurpurascens tinctæ, linea obliqua recta ochraceo-fusca extus purpurascens-albo marginata costam versus angulata, puncto discali interiore nigro ; anticæ falcatæ, margine exteriori subangulato ; posticæ margine exteriori angulato subcaudato.*

*Phalæna-Geometra transversata*, *Drury, Exot. Ins. i. 16, pl. 8, f. 2.*

*Chærodes goniata*, *Guen. Phal. i. 38, 23.*

*a—d.* New York. Presented by E. Doubleday, Esq.

*e—g.* United States. Presented by E. Doubleday, Esq.

*h.* Illinois. Presented by E. Doubleday, Esq.

*i.* ——— ?

#### 4. CHÆRODES TRANSVERTENS.

- Mus. Pallidissime ochracea ; caput fuscens, supra albidum ; palpi apice nigricantes ; pedes nigro conspersi ; alæ nigro sabulosæ, strigulis paucis indistinctis ochraceis, linea recta albida intus ochraceo marginata, linea exterior nigricante diffusa angulosa, puncto discali nigro ; anticæ subfalcatæ, linea costam versus e punctis elongatis albis, margine exteriore viz angulato ; posticæ angulo bene determinato non caudato.*

*Male.* Very pale ochraceous, mostly whitish beneath. Head brownish, whitish above. Palpi with blackish tips. Legs minutely black-speckled ; anterior knees black ; hind tibiæ much thickened. Wings with a few indistinct little transverse ochraceous streaks, and with a few minute black speckles ; the latter more prevalent on the under side ; the line straight, oblique, whitish, bordered with ochraceous on its inner side ; discal interior black point distinct ; a blackish exterior diffuse zigzag line, which is almost obsolete on the fore wings. Fore wings subfalcate ; the line towards the costa indicated only by elongated white points on the veins ; exterior border very slightly bent, hardly angular. Hind wings with a very distinct angle, but not caudate. Length of the body 8 lines ; of the wings 19 lines.

This species, like *C. incurvata*, may be distinguished from the other three preceding species by the exterior border of the fore wings ; it also agrees with *C. incurvata* in having no traces of the inner line, which is very distinct in *C. transposita*, slight in *C. transversata*, and almost or quite obsolete in *C. transmutans*. The more prominent angle of the hind wings and the colour of the line sufficiently separate it from *C. incurvata*.

*a.* St. John's Bluff, East Florida. Presented by E. Doubleday Esq.

## 5. CHÆRODES TRANSMUTANS.

**Fem.** *Rufescente-ochracea, nigro subconspersa; caput supra albidum; alæ vix purpurascentes, linea recta cinerea fusco marginata, puncto discali nigro; anticæ falcatæ, linea antice albo punctata costam versus obsoleta, margine exteriori vix angulato; posticæ angulo bene determinato subcaudato.*

**Female.** Reddish ochraceous, slightly and minutely speckled with black. Head whitish above. Wings hardly purplish-tinged, with a straight oblique cinereous line, which is bordered with brown on both sides; a black interior discal point. Fore wings acute, falcate; the line with white points on its fore part, ceasing on approaching the costa; exterior border very slightly angular. Hind wings with the exterior border distinctly angular and slightly caudate; interior border fringed with white hairs. Length of the body 7—8 lines; of the wings 20—22 lines.

Whether this is a distinct species, or whether it and *C. transversa*, and some of the following species are mere varieties of *C. transversa* is a question yet to be decided. The line and the black points of the wings distinguish it from *C. transversa*, and in both these characters it resembles *C. incurva*, from which it differs by the angular exterior border of the fore wings, and by the more decided angle of the hind wings.

**a—c.** St. John's Bluff, East Florida. Presented by E. Doubleday, Esq.

**Var. Male.** Fawn-colour, paler, cinereous-tinged and black-speckled beneath. Head whitish between the antennæ. Wings with a slight pale purplish tinge; line almost straight, of a rather darker fawn-colour than the ground hue, bordered with pale purplish on the outer side; black discal point very minute. Fore wings falcate; costa convex; exterior border forming an extremely obtuse angle in the middle; line obsolete near the costa. Hind wings with an acute angle in the middle, but not caudate. Length of the body 7 lines; of the wings 22 lines.

**Var.** Very little larger and more ochraceous. Wings with a larger discal point. Fore wings with white points on the fore part of the line.

The two specimens here described differ slightly in aspect and markings from the typical form of *C. transmutes*, and are probably local varieties of that species, but their native place is unknown.

**d, e.** ——— ?

## 6. CHÆRODES CONTINGENS.

**Mas.** *Pallide ochracea, fusco conspersa ; caput supra albidum ; antennæ subsetosæ, non serratæ ; tibiæ posticæ incrassatæ ; alæ strigulis transversis fuscis, linea ferruginea subrecta, puncto discali nigro distincto ; anticæ falcatæ, linea costam versus rectangulata, linea interiore diffusa undulata, costa vix convexa, margine exteriori vix angulato ; posticæ vix caudatæ.*

**Male.** Pale ochraceous, testaceous beneath, where the brown speckles are more conspicuous. Head whitish between the antennæ. Antennæ minutely setose, not serrated. Hind tibiæ very tumid. Wings transversely and minutely brown streaked : line ferruginous, nearly straight ; discal black point distinct. Fore wings falcate, with an interior diffuse undulating line ; exterior line forming a right angle near the costa ; costa hardly convex ; exterior border forming a very slight and much rounded angle. Exterior border of the hind wings forming a very short, broad and much rounded tail. Length of the body 8 lines ; of the wings 22 lines.

This species is most allied to *C. transversata*, but is sufficiently distinguished by the structure of the wings.

**a.** Nova Scotia. From Lieut. Redman's collection.

## 7. CHÆRODES TRANSDUCENS.

**Mas.** *Ochraceo-cervina, nigro sabulosa ; caput supra album ; alæ purpurascente pallido subinctæ, linea recta pallide testacea intus cervino marginata, puncto discali nigro sat magno, spatio marginali albido-purpurascente ; anticæ falcatæ, linea costam versus angulum peracutum fingente, margine exteriori perparum flexo non angulato ; posticæ margine exteriori subundulata, angulo brevi lato vix bifurcato.*

**Male.** Ochraceous fawn-colour, with minute black speckles, which are most prevalent on the under side. Head white above. Wings with a slight pale lilac tinge ; the line straight, pale testaceous, bordered with fawn-colour on the inner side ; interior black discal point rather large ; marginal space with a lilac whitish tinge. Fore wings more falcate than in any of the preceding species ; the line near the costa forming a very acute angle, and curved from thence to the costa ; exterior border very slightly bent, not angular. Hind wings with the exterior border slightly undulating ; a broad short slightly bifurcate angle representing the caudal angle in the



preceding species. Length of the body 9 lines; of the wings 24 lines.

The structure of the hind wings is sufficient to distinguish this species from all those previously mentioned.

4. Trenton Falls, New York. Presented by E. Doubleday, Esq.

### 8. CHÆRODES TRANSFERENS.

Fœm. *Ochracea, nigro conspersa; caput supra album; alæ extus subpurpurascentes, linea recta pallide testacea; puncto discali nigro; antica valde falcata, linea costam versus angulum per-  
scutum fingente, linea exterior nigra indistincta undulata, margine exterior vix undulato; postica linea valde indistincta, margine exterior undulato.*

*Female.* Ochraceous, with minute black speckles, which are most prevalent on the under side. Head white above. Wings with a slight purplish tinge beyond the line; the latter straight, pale testaceous; interior black discal point rather small. Fore wings extremely falcate; the line near the costa forming an extremely acute angle, having between it and the exterior border an indistinct undulating black line formed of contiguous speckles; exterior border very slightly undulating, most prominent in the middle. Hind wings with the line very indistinct; exterior border distinctly undulating, forming a rounded angle in the middle. Length of the body 8 lines; of the wings 24 lines.

This species may prove to be the female of *C. transducens*, from which it differs in the exterior border of the wings, in the much more falcate fore wings, and in the more acute angle formed by the line, the latter also being longer and less curved between its angle and the costa.

4. St. John's Bluff, East Florida. Presented by E. Doubleday, Esq.

Var. *Mas. Cervina; alæ subpurpurascente tinctæ, linea sub-  
recta subpurpurascente extus marginata; antica linea costam  
versus obsoleta; postica angulata, non caudata.*

Var. *β.* Rather larger and more ochraceous than the preceding specimen. Wings largely whitish varied; discal point much larger; line ferruginous-brown.

4. — ?

*Var. γ.* A little larger than *var. β*; line ochraceous.

*c.* Nova Scotia. From Lieut. Redman's collection.

*d.* Trenton Falls, New York. Presented by E. Doubleday, Esq.

## West Indies.

### 9. CHÆRODES TRANSPONENS.

*Mas.* *Obscure flavescens; caput supra album; pedes nigro guttati; alæ linea recta fusca, extus purpurascens; antica falcata, margine exteriori incisuris parvis, linea albo punctata costam versus obsoleta, striga costali arcuata angulosa albida, puncto discali parvo; postica macula magna exteriori nigra, margine exteriori convexo, linea indistincta.*

*Male.* Dull yellowish, with numerous little transverse streaks which are blackish in the hind wings, brown and partly confluent in the fore wings. Head white above. Legs with numerous black dots. Wings with a straight brown line, between which and the exterior border they have a purplish tinge; under side brighter, with more concise black points. Fore wings distinctly falcate; exterior border straight from the apical hook to the interior angle, excepting a slight notch opposite each vein; the line accompanied by white points on the veins, obsolete towards the costa, where there is a white curved zigzag streak, like that of the two preceding species, but more distinct; discal black point minute. Hind wings with a large black exterior spot in front; exterior border convex, not angular or undulating; line indistinct. Length of the body 10 lines; of the wings 26 lines.

This *Chærodes* differs much from all the North American species, and with *C. transcissa* will form a new group in the genus.

*a.* St. Domingo. From Mr. Tweedie's collection.

### 10. CHÆRODES TRANSTINCTA.

*Fœm.* *Cervina, nigro conspersa; caput supra albidum; alæ linea recta ferruginea subduplicata, spatio interiori subpurpurascens, spatio exteriori obscuriore, puncto discali nigro distincto; antica falcata, costa non convexa, margine exteriori subflexo non angulato; postica caudata.*

*Female.* Fawn-colour, black-speckled, mostly cinereous beneath. Head whitish between the antennæ. Wings with a purplish tinge.

on the inner side of the straight ferruginous indistinctly double line; exterior part darker, partly tinged with ferruginous-brown; black discal point distinct. Fore wings falcate; costa not convex; exterior border slightly bent, not angular. Exterior border of the hind wings forming a distinct but rounded tail. Length of the body 7 lines; of the wings 22 lines.

It has the general structure of *C. tetragonata*, but the tails of the hind wings are much less broad.

• Jamaica. From Mr. Gosse's collection.

### South America.

A. Alæ anticæ non productæ.

A. Alæ anticæ linea nulla interiore.

A. Alæ non chalybæo tinctæ.

a. Alæ posticæ angulatæ.

i. Alæ extus nebulosæ.

\* Alæ non purpurascente variæ.

† Alæ posticæ caudatæ.

‡ Tibiæ posticæ fusco notatæ. - *tetragonata*, *Guen.*

‡ Tibiæ posticæ ochraceæ. - *sectata*, *Guen.*

†† Alæ posticæ non caudatæ. - *transfindens*, *Walk.*

\*\* Alæ purpurascente variæ.

† Alæ posticæ non albo marginatæ. *invisata*, *Guen.*

†† Alæ posticæ albo marginatæ. - *striata*, *Stoll.*

ii. Alæ extus non nebulosæ.

\* Alæ linea pallida. - - *transpectans*, *Walk.*

\*\* Alæ linea obscura. - - *invariaria*, *Walk.*

b. Alæ posticæ non angulatæ. - - *transcendens*, *Walk.*

a. Alæ chalybæo tinctæ. - - *translinquens*, *Walk.*

B. Alæ anticæ linea interiore. - *translineata*, *Walk.*

B. Alæ anticæ productæ. - - *transcissa*, *Walk.*

### 11. CHÆRODES TETRAGONATA.

*Mm. Pallide cervina; alæ nigro sabulosæ, linea obliqua vix undulata nigro-fusca, linea interiore tenui abbreviata fusca, punctis discalibus nigris, linea exteriori fusca angulosa indistincta incompleta; anticæ subfalcatæ, linea costam versus angulata, margine exteriori recto; posticæ subcaudatæ, angulo lato obtuso strigato.*

*Chærodes tetragonata*, *Guen. Phal.* i. 36, 16, pl. 8, f. 1.

It almost exactly resembles *C. transpectans* in structure, with the exception of the caudal angle of the hind wings.

Brazil.

a. Venezuela. From Mr. Dyson's collection.

b. Quito. Presented by M. Bourcier.

## 12. CHÆRODES SECTATA.

Mas. *C. tetragonatæ simillima, pallidior magis flavescens; fr cinerascens; tibiæ posticæ ochraceæ; alæ anticæ costa longi striga nulla; posticæ margine exteriori anteriore subconv aut magis rotundato.*

*Chærodes sectata*, *Guen. Phal.* i. 36, 17.

Brazil.

## 13. CHÆRODES INVISATA.

Mas et fœm. *C. sectatæ simillima; alæ dimidio interiore purpurascentes, extus magis rufescentes, linea magis r duplicata subpurpurascente divisa; anticæ margine exteriori recto, incisura subapicali, linea costam non attingen posticæ linea indistincta nigra angulosa submarginali.*

*Chærodes invisata*, *Guen. Phal.* i. 37, 18.

Brazil.

## 14. CHÆRODES STRIATA.

*Fusca; alæ linea recta purpurascente, strigulis plurimis inter bus transversis purpurascentibus; anticæ falcata, margine teriore recto; posticæ subcaudatæ, linea marginali alba.*

*Phalæna-Geometra striata*, *Stoll. Cram. Pap. Exot.* v. 155, pl f. 7.

*Chærodes striata*, *Guen. Phal.* i. 37, 19.

Surinam.

## 15. CHÆRODES TRANSPECTANS.

Fœm. *Albido-cervina; caput fuscens; alæ nigro sabu linea alba subrecta intus cervino marginata, puncto di nigro distinctissimo, linea exteriori cervina angulosa si soleta; anticæ falcata, margine exteriori recto, linea c versus obsoleta; posticæ subcaudatæ, apud angulum punctatæ.*

*Female.* Whitish fawn-colour, almost whitish beneath. Head and palpi brownish. Wings with very minute black speckles, which are hardly apparent above, but more numerous on the under side; the white, nearly straight, bordered with fawn-colour on the inner side; discal point black, very distinct; an almost obsolete fawn-colored zigzag exterior line. Fore wings falcate; exterior border very straight; line ceasing near the costa. Hind wings subcaudate; angle with black speckles; the exterior border on each side of the angle very straight. Length of the body 7—8 lines; of the wings 22—24 lines.

It is closely allied to *C. transversens*, and may be the female of that species. It differs from the male of *C. transversens* by its more falcate fore wings, by the very straight exterior border, by the more subcaudate hind wings, and by the black speckles on the angle.

♂. Venezuela. From Mr. Dyson's collection.

#### 16. *CHCERODES INVARIARIA.*

*Fem.* *Pallide cinereo-cervina; alæ amplæ, nigro conspersæ, linea nigricante recta integra duplicata, puncto discali nigro; antica falcata, costa strigata subconvexa, margine exteriori recto subobliquo; posticæ cauda distincta obtusa fusco strigata.*

*Female.* Pale cinereous fawn-colour. Wings ample, minutely black-speckled; line blackish, double, quite straight and complete; discal point small, black, distinct. Fore wings falcate, costa slightly convex, transversely streaked; exterior border slightly oblique, the straight, except at the tip. Exterior border of the hind wings with a distinct obtuse brown-streaked tail. Length of the body 8 lines; of the wings 24 lines.

It resembles *C. tetragonata* in structure, but the line of the wings is very different.

♂. Janeiro. In Mr. Fry's collection.

#### 17. *CHCERODES TRANSLINQUENS.*

*Fem.* *Saturate ochracea; alæ elongatæ, argenteo conspersæ, linea recta nigricante fusca argenteo marginata, linea exteriori nigra angulosa distincta, margine exteriori recto; antica falcata, macula discali argentea, linea interiori undulata nigra argenteo marginata.*

*Female.* Deep ochraceous, paler beneath on the exterior part of the wings. Wings elongate, sprinkled with silvery white; line blackish brown, bordered with silvery white, very straight and complete, extending quite to the tips of the fore wings; a distinct exterior zigzag black line. Fore wings falcate, with a silvery discal space and with an interior undulating black and silvery line; exterior border very straight. Hind wings with the exterior border quite straight, and having no indications of an angle. Length of the body 8 lines; of the wings 22 lines.

This species has a general resemblance to *C. striata*, but is quite different from it in the structure of the hind wings.

a. Rio Janeiro. In Mr. Stevens' collection.

#### 18. CHÆRODES TRANSCENDENS.

*Fœm.* *Cervina*; *pedes fusco fasciati et maculati*; *alæ nigro conspersæ, vix purpurascentes, linea testacea recta intus cervicali marginata*; *anticæ falcatæ, lituris costalibus transversis profundioribus, costa convexa, margine exteriori non flexo, laticostam versus angulata alba, puncto discali nigro parvo*; *posticæ margine exteriori non angulato.*

*Female.* Fawn-colour. Legs with brown bands and spots. Wings hardly purplish tinged, with very minute black speckles, which are most prevalent on the under side; line testaceous, straight, tinct, bordered on the inner side with fawn-colour of a deeper tinge than the ground hue of the wing. Fore wings falcate, with a slight transverse paler mark along the costa, which is convex; exterior border slightly convex, not bent; line forming a slightly acute angle near the costa, on approaching which it is white and gradually dilated; discal black point small. Exterior border of the hind wings convex, without any angle. Length of the body 8? lines; of the wings 22 lines.

This species has some resemblance in structure to *C. incana*, from which it is sufficiently distinguished by the shape of the wings.

a. West Coast of America. Presented by Capt. Kellett, Lieut. Wood.

#### 19. CHÆRODES TRANSLINEATA.

*Mas.* *Cervina*; *alæ fusco subconsersæ, linea recta*; *anticæ falcatæ, puncto discali nigro, costa subconvexa, margine*

*riore recto, linea rufescente costam versus rectangulata, linea interiore rufescente subrecta non obliqua; postica linea fusca, linea exterior angulosa subobsoleta, margine exterior non angulato.*

**Male.** Fawn-colour, slightly cinereous beneath. Wings tightly and minutely speckled with brown points, which are elongated exteriorly and along the costa of the fore wings; discal point black, obsolete above in the hind wings; line straight. Fore wings subfalcate; costa slightly convex; exterior border quite straight; the line reddish, forming a right angle on approaching the costa; an inner reddish upright almost straight line, which is slightly bent near the costa. Hind wings with a brown line, a very indistinct and diffuse zigzag exterior line; exterior border convex, without any angle. Length of the body 9 lines; of the wings 22 lines.

This species resembles the preceding one in structure.

**c. Venezuela.** From Mr. Dyson's collection.

## 20. CHÆRODES TRANSCISSA.

**Mas et form.** *Testacea; alæ nigro subconspersæ; anticae falcatae, elongatae, lituris costalibus transversis cinereis, linea valde indistincta, albo punctata costam versus obsoleta, striga costali subapicali alba arcuata nigro notata, lituris duabus transversis discalibus, margine exterior recto sat obliquo; posticae litura apud angulum interiorem ochracea albo varia nigro conspersa, margine exterior convexo non angulato.*

**Male and female.** Testaceous, whitish testaceous beneath. Legs minutely speckled with black. Wings beneath minutely and finely speckled with black. Fore wings falcate, somewhat elongated, with transverse cinereous marks along the costa; line very indistinct, hardly darker than the ground hue, marked with white points on the veins, obsolete towards the costa; a white curved costal subapical black-marked streak; two transverse discal marks, a little darker than the ground hue, the outer one broader than the inner one; exterior border straight, rather oblique. Hind wings paler than the fore wings, except towards the exterior border; line darker, more distinct; an ochraceous partly white black-speckled mark by the interior angle, forming the end of a diffuse zigzag hardly apparent line, which is still more indistinct in the fore wings; exterior border convex, is no wise angular. Length of the body 9—10 lines; of the wings 23—24 lines.

This species and *C. transponens* have the same structure.

*a, b.* Bogotá. From Mr. Stevens' collection.

### Country unknown.

#### 21. CHÆRODES INCAUDATA.

**Mas.** *Cervino-cinerea ; pedes antici annulis albis et nigro-fuscis ; alæ confertim strigatæ, extus pallidiores, linea obscuriore vaga subarcuata ; anticæ linea costam versus obsoleta albo unipunctata, margine exteriori subflexo ; posticæ linea cinerascente nebuloza, margine exteriori ex parte cinerascente-albo, fimbria basi fusca apice alba.*

*Chærodes incaudata, Guen. Phal. i. 39, 24.*

Brazil ?

#### 22. CHÆRODES ONUSTARIA.

**Mas.** *Pallide cervina ; alæ strigulis transversis obscurioribus, linea fusca recta, spatio exteriori luteo ; anticæ non falcata, margine exteriori recto ; posticæ subcaudatæ, linea exteriori undulata cinerea, angulo caudali punctis nigris, linea marginali pallida.*

*Therinia onustaria (Geometra ampla, Lars indulgens), Geyer, Zutr. Samml. Exot. Schmett. 19, 334, f. 667, 668.*

*Chærodes onustaria, Guen. Phal. i. 37, 20.*

Java ?? South America ?

#### 23. CHÆRODES TRANSFINDENS.

**Mas.** *Ochracea ; alæ fusco confertim strigatæ, linea cinerea fusco marginata vix undulata, lineis interiore et exteriori subobsoletis, hac angulosa, punctis discalibus distinctis ; anticæ vix falcata, plaga exteriori fusca, margine exteriori perparum convexo ; posticæ angulo obtuso.*

**Male.** Ochraceous, with a pale cinereous tinge beneath. Wings with numerous little transverse brown streaks ; line cinereous, hardly undulating, bordered with brown on both sides ; some slight traces of two other brown lines, the exterior one zigzag ; discal black points distinct. Fore wings hardly falcate ; exterior border very slightly convex ; a brown patch adjoining the outer side of the line. Hind



wings with the exterior border straight on each side of the obtuse angle. Length of the body 9 lines ; of the wings 22 lines.

This species has the structure of *C. onustaria*, but its wings are not luteous exteriorly, and the angle of its hind wings is not black-speckled.

α. ——— ?

#### 24. CHÆRODES TRANSFINGENS.

**Mas.** *Cervina, subtus cinerea ; caput supra album ; antennæ serratæ ; alæ dense vestitæ, nigro conspersæ, cinereo variæ, linea albida subrecta extus purpurascente marginata ; anticæ falcatæ, costa cinerea fuscescente strigata subconvexa, margine exteriori subflexo viz dentato, linea costam versus furcata, linea interiori viz conspicua, puncto discali distincto ; posticæ magis dentatæ, viz angulatæ, linea indistincta, puncto discali minimo.*

**Male.** Fawn-colour ; under side cinereous, with a slight tinge of fawn-colour, black-speckled. Head white between the antennæ. Antennæ serrated. Abdomen much paler than the thorax. Wings densely clothed, black-speckled, irregularly varied with cinereous ; base whitish, almost straight, irregularly purplish-bordered on the exterior side. Fore wings falcate ; costa cinereous, transversely brownish-streaked, slightly convex ; exterior border hardly dentate, slightly bent in the middle, but not angular ; line near the costa retracted, and forming an acute angle, between which and the costa there is an irregular whitish streak ; some traces of a diffuse interior line ; discal point distinct. Hind wings more dentated than the fore wings, hardly angular ; discal point much smaller ; line indistinct. Length of the body 9 lines ; of the wings 22 lines.

This species has much resemblance to *C. transducens*, but is sufficiently distinct.

α. ——— ?

#### Genus 4. IDIODES.

**Corpus robustum.** Proboscis brevis. Palpi contigui, læves, squamosi, subrecti, caput per paullo superantes ; articulus 3us brevissimus. Antennæ validæ, non ciliatæ, maris subtus velutinæ. Abdomen apice conicum et acutum. Pedes robusti ; tibiæ posticæ imbricatæ, fasciculatæ. Alæ validæ, linea una recta obliqua, fimbria brevi ; anticæ subproductæ, apice acutæ et falcatæ ; posticæ angulo interiore subproducto.

*Idiodes*, Guen. *Phal.* i. 39.

Body stout. Proboscis rather short. Palpi contiguous, smooth, squamous, almost straight, rising very little higher than the head; third joint extremely short. Antennæ stout, without ciliæ, pubescent beneath in the male. Abdomen conical and acute at the tip in both sexes. Legs stout; hind tibiæ tumid and with tufts of hairs. Wings robust, generally with a single straight oblique line; fringe short. Fore wings somewhat oblong, acute and falcate at the tips. Hind wings with the interior angle slightly prolonged.

### Australia.

- A. Alæ anticæ striga apicali nigra. - - - apicata, *Guen.*  
 B. Alæ anticæ striga nulla apicali nigra.  
 A. Alæ fascia nulla nebulosa.  
 A. Alæ linea non duplici.  
 a. Alæ anticæ vix falcatæ. - - - mitigata, *Guen.*  
 b. Alæ anticæ falcatæ. - - - inspirata, *Guen.*  
 B. Alæ linea duplici. - - - rinata, *Guen.*  
 B. Alæ fascia nebulosa. - - - introducta, *Walk.*

### 1. IDIODES APICATA.

*Fœm. Rufescente-testacea; palpi frontem paullo superantes; alæ linea obliqua vix saturatiore; anticæ linea duplicata, puncto discali strigaeque apicali nigris, linea submarginali dentata subobsoleta; posticæ apud angulum interiorem nigro conspersæ, litura discali subtilis et atomis nigricantibus.*

*Idiodes apicata, Guen. Phal. i. 40, 25.*

Tasmania.

### 2. IDIODES MITIGATA.

*Rufo-cervina; alæ nigro subconsersæ; linea obliqua recta testacea intus cervino marginata, punctis marginalibus nigris, linea exteriore subtilis et punctis nigris; anticæ subfalcatæ, linea costam versus obsoleta, puncto discali nigro; posticæ puncto apud lineam antico nigro, macula subtilis discali nigro.*

*Idiodes mitigata, Guen. Phal. i. 40, 26, pl. 13, f. 1.*

- a. Sydney. From Mr. Diggles' collection.  
 b. Australia. From Mr. Damel's collection.  
 c. Australia. From Mr. Milne's collection.

## 3. IDIODES INSPIRATA.

Var.? *Mas.* *Cinereo-cervina*; *caput nigro fasciatum*; *alæ nigro fuscoque conspersæ, linea pallide testacea intus cervino fasciata, punctis submarginalibus et marginalibus nigris*; *anticæ falcate, costa albida, linea apud costam obsoleta, puncto discali nigro*; *posticæ macula subtus magna discali nigricante.*

*Idiodes inspirata, Guen. Phal. i. 40, 27.*

Var.? *Male.* Cinereous fawn-colour, more cinereous beneath. Head with a white band between the antennæ, which are white above, luteous beneath. Wings with numerous black or brown speckles, which are larger on the under side; line pale testaceous, bordered with fawn-colour on the inner side; an exterior line composed of black points; marginal points black. Fore wings falcate; costa whitish; line obsolete towards the costa; discal point black. Hind wings beneath with a large blackish discal spot. Length of the body 8 lines; of the wings 20 lines.

It differs from Guenée's description in the wings having no submarginal shade beneath.

a. Tasmania. Presented by R. Butler, Esq.

b. Tasmania. Presented by M. Allport, Esq.

## 4. IDIODES RINATA.

Var.? *Mas.* *Pallide cinereo-cervina*; *alæ nigro conspersæ, linea ferruginea duplicata, punctis marginalibus nigris, punctis subtus submarginalibus nigris*; *anticæ falcate, puncto discali subobsoleto*; *posticæ macula subtus parva discali fusca.*

*Idiodes rinata, Guen. Phal. i. 40, 28.*

Var.? *Male.* Pale cinereous fawn-colour, cinereous beneath. Wings with minute black speckles which are few above, more numerous beneath; line ferruginous, double along its whole length except near the costa of the fore wings, where it is single and diffuse; marginal points black, small; under side with an incomplete line of black points. Fore wings falcate; discal point nearly obsolete. Hind wings beneath with a small brown discal spot. Length of the body 8 lines; of the wings 18 lines.

The specimen here described differs from the variety of *T. inspirata* in having no white band on the head, in the fore wings having the costa of the ground hue, and in the much smaller discal point.

a. Australia. From Mr. Milne's collection.

## 5. IDIODES INTRODUCTA.

**Fœm.** *Rufescente-cervina; alæ nigro conspersæ, linea recta duplicata obscure fusca, fascia exteriori fusciscente-cinerea valde dentata, punctis marginalibus nigris; antica falcata, linea costam versus subflexa non duplici, puncto discali nigro, linea interiore fusca undulata diffusa; posticæ macula subtus fusca discali.* **Var.**—*Alæ linea pallida simplici; antica linea interiore obsoleta; posticæ macula subtus magna nigricante.*

**Female.** Reddish fawn-colour, paler beneath. Palpi not rising higher than the front. Wings minutely speckled with black; line dark brown, straight, double, bordered on the outer side by a deeply dentated brownish cinereous band; marginal points black. Fore wings falcate; line single and slightly bent on approaching the costa, extending to the tip of the wing; discal point black; interior line brown, undulating, diffuse. Hind wings with a brown discal spot beneath. **Var. ♀**—Line pale, single. Fore wings with the interior line obsolete. Hind wings with the spot beneath large, blackish. Length of the body 7 lines; of the wings 20 lines.

This may be the female of *T. rinata*.

*a, b.* Tasmania.

Country unknown.

## 6. IDIODES PRIVATA.

**Mas.** *Testacea; alæ antica falcata, spatio basali, fascia exteriori undulata margineque rufescentibus, puncto discali nigro, litura subtus subapicali nigra, margine exteriori convexo; posticæ ochraceæ, basi luteæ, disco subtus albido.*

*Idiodes privata*, *Guen. Phal. i. 41, 29, pl. 14, f. 4.*

It differs much in character from the preceding species, which are typical of the genus.

## Genus 5. CIRSODES.

**Corpus** valde robustum. **Frons** globosa, non fasciculata. **Palpi** recti, caput paullo superantes; **articulus** 3us distinctus, nudus. **Antennæ** cylindricæ, filiformes. **Thorax** amplus, subquadratus, villosus. **Abdomen** carinatum, subdepressum, maris apice planum sæpe dehiscens. **Pedes** robusti; **tibiæ** tumidæ, **calcaribus** parvis. **Alæ** oblongæ, integræ, velutinæ; **antiçæ** valde acutæ, **margine** exteriori

fœminæ flexo, macula magna discali; posticæ angulo interiore acuto.

*Cirsodes*, *Guen. Phal.* 41.

Body very robust. Front very convex, not tufted. Palpi straight, rising a little above the head; third joint distinct, bare. Antennæ cylindrical and filiform in both sexes. Thorax large, subquadrate, villose. Abdomen keeled, slightly depressed, flattened and often divided at the tip in the male. Legs robust; tibiæ tumid; spurs short. Wings oblong, entire, velvety. Fore wings very acute; exterior border bent in the female; a large discal spot. Hind wings with the interior angle acute.

### 1. *CIRSODES ACUMINATA*.

*Mas.*—*Straminea*; *alæ vix conspersæ, punctis subtilis marginalibus nigris; anticæ apice elongatæ et valde acutæ, fasciis duabus nebulosis vix distinctis, costa maculaque magna subtilis rufo-fuscis; posticæ fuscia unica, margine exteriori rotundato, angulo interiore subelongato.* *Fœm.*—*Major; alæ anticæ macula magna discali nigra.*

*Cirsodes acuminata*, *Guen. Phal.* i. 41, 30.

Brazil.

### 2. *CIRSODES MACILENTATA*.

*Mas et fœm.* *C. acuminatæ simillima, minor, statura graciliore, abdomine brevior, tibiis posticis brevioribus.* *Fœm.*—*Alæ anticæ magis falcatæ.*

*Cirsodes macilentata*, *Guen. Phil.* i. 42, 31.

Colombia.

### 3. *CIRSODES LEODORATA*.

*Fœm.* *C. macilentatæ affinis, alba; alæ carneo sordido suffusæ, lineis duabus vix conspicuis nebulaque viridescente contiguis, punctis duobus discalibus nigris; anticæ plus falcatæ, marginis exterioris angulo magis determinato; posticæ linea tenui interrupta.*

*Cirsodes Leodorata*, *Guen. Phal.* i. 42, 32.

Colombia.

## Genus 6. SABULODES.

Corpus mediocre. Frons globosa. Proboscis mediocris. Palpi recti, caput paullo superantes; articulus 3us nudus, valde distinctus. Antennæ simplices, intus velutinæ, rarissime pectinatæ. Pedes robusti, longiusculi; tibiæ posticæ inflatæ. Alæ velutinæ, pallidæ, sabulosæ, lineis indistinctis, fimbria longiuscula. *Mas.*—Abdomen longum, depressum aut carinatum, lateribus villosis, fasciculis apicalibus. *Fæm.*—Abdomen crassum, apice obtusum.

Sabulodes, *Guen. Phal. i. 42.*

Body moderately stout. Front very convex, without a prominent tuft. Proboscis moderately long. Palpi straight, rising a little above the head; third joint bare, very distinct. Antennæ simple, velvety on the inner side, pectinated in one species. Abdomen of the male long, depressed or keeled, pilose on the sides and with apical tufts; that of the female thick, with an obtuse point. Legs robust, rather long; hind tibiæ tumid. Wings velvety, pale, finely powdered; lines indistinct; fringe rather long.

## South America.

## A. Alæ non angulosæ.

## A. Alæ anticæ vix dentatæ.

## A. Tibiæ posticæ vix incrassatæ.

a. Alæ anticæ angulo vix conspicuo. - *Dositheata, Guen.*

b. Alæ anticæ angulo bene determinato. *Colombiata, Guen.*

## B. Tibiæ posticæ incrassatæ.

a. Palpi breves. - - - - *muscistrigata, Guen.*

b. Palpi caput superantes. - - - *pectinicornata, Guen.*

## B. Alæ anticæ deutatæ.

A. Alæ subtus umbra submarginali obscura. *acidaliata, Guen.*

B. Alæ subtus lituris nullis. - - - *dentinata, Guen.*

## B. Alæ angulatæ.

## A. Alæ non dentatæ.

A. Alæ albæ. - - - - *exhonorata, Guen.*

B. Alæ flavescentes. - - - - *caberata, Guen.*

B. Alæ dentatæ. - - - - *himerata, Guen.*

## 1. SABULODES DOSITHEATA.

**Mas et fœm.** *Pallide testacea; tibiæ posticæ maris parum tumidæ; alæ subsericeæ, conspersæ, nebulis duabus cinerascentibus flexuosis vix conspicuis nigro punctatis, punctis albo notatis, margine exteriori rotundato vix angulato, puncto discali nigro.*

*Sabulodes Dositheata, Guen. Phal. 43, 33.*

Brazil.

## 2. SABULODES COLOMBIATA.

**Fœm.** *S. Dositheatæ simillima; statura robustior; alæ angulo bene determinato.*

*Sabulodes Colombiata, Guen. Phal. i. 44, 34.*

Colombia.

## 3. SABULODES MUSCISTRIGATA.

**Mas et fœm.**—*Pallidissime testacea; palpi breves; tibiæ posticæ tumidæ; alæ subsericeæ, rotundata, margine, linea interiore fasciæque exteriori flexa rufescente-cinereis, linea media recta, venis punctatis, spatio postico pallidissime viridescente, puncto discali nigro; anticæ nebula subapicali violaceo-fusca. Mas.—Alæ margine exteriori vix flexo. Fœm.—Alæ margine exteriori sat flexo.*

*Sabulodes muscistrigata, Guen. Phal. i. 44, 35.*

Brazil.

## 4. SABULODES ACIDALIATA.

**Fœm.** *Pallide ochraceo-cinerea; palpi caput superantes; alæ fusci conspersæ, nebulis undatis rufescente-cinereis, margine exteriori dentato, punctis marginalibus nigris; anticæ nebulis quatuor, margine exteriori vix flexo; posticæ nebulis tribus parallelis, margine exteriori rotundato.*

*Sabulodes acidaliata, Guen. Phal. i. 44, 36.*

Brazil.

## 5. SABULODES DENTINATA.

**Fœm.** *Testaceo-cinerea; palpi caput superantes; alæ fusco conspersæ, puncto discali punctisque venarum albo notatæ, margine exteriori dentato, punctis marginalibus nigris; antica acutæ, margine exteriori flexo.*

*Sabulodes dentinata*, *Guen. Phal. i. 44, 37.*

Colombia.

## 6. SABULODES PECTINICORNATA.

**Mas.** *Pallide ochracea; palpi caput superantes; antennæ valde pectinatæ; tibiæ posticæ valde tumidæ, lanuginosæ; alæ fusco conspersæ, umbra vix conspicua, puncto discali punctisque apud venas nigris, umbra subtus submarginali vaga abbreviata; anticae fere integræ; posticæ subdentatæ.*

*Sabulodes pectinicornata*, *Guen. Phal. i. 45, 38.*

Brazil.

## 7. SABULODES EXHONORATA.

**Mas.** *Alba; tibiæ posticæ fusco notatæ, non tumidæ; alæ fuscescente-cinereo conspurcatæ et conspersæ, nebulis aut fascioli indistinctis, punctis apud venas fuscis, margine exteriori angulato, punctis subtus submarginalibus; anticae margine exteriori antico quadrato.*

*Sabulodes exhonorata*, *Guen. Phal. i. 45, 39.*

Brazil.

## 8. SABULODES CABERATA.

**Mas.**—*Stramineo-flava; tibiæ posticæ tumidæ, fasciculo nigro cinereo; alæ fuscescente-cinereo valde conspersæ, fascioli indistinctis, angulo marginis exterioris bene determinato, anticae fasciola 2a bifurcata; posticæ fascioli duabus parallelis, 2a punctis nigris apud venas notata. Fœm.*—*Major alæ anticae angulo magis determinato.*

*Sabulodes caberata*, *Guen. Phal. i. 45, 40.*

Brazil.



## 9. SABULODES HIMERATA.

Mas et fem. Stramineo-flava; tibiæ posticæ incrassatæ, pallido fasciculatæ; alæ apud marginem anteriorem rufescente tinctæ; antice subfalcatæ, fascia obliqua rufescente-ferrugineo marginata, spatio anteriore albido guttam discalem includente, costa convexa, margine posteriore angulato; posticæ lineis duabus parallelis ferrugineis, linea exteriori postice nigro punctata, punctis apud venas submarginalibus nigris.

*Sabulodes himerata*, Guen. *Phal.* i. 46, 41, pl. 6, f. 6.

Basil.

## Genus 7. EUTRAPELA.

Corpus sat robustum. Proboscis longa, robusta. Palpi recti, squamoso-hirsuti, apice contigui, caput paullo superantes; articuli indistincti. Antennæ maris brevissime laminatæ, foeminæ subdentatæ. Tibiæ posticæ subtumidæ. Alæ dentatæ, angulatæ, lineæ nuda; antice maris apice falcatæ, foeminæ apice attenuatæ.

Lagonia, p., Hübn. *Verz. Schm.* 291.

*Eutrapela*, Hübn.; Guen. *Phal.* i. 46.

Body rather stout. Proboscis long, robust. Palpi straight, squamous-hirsute, rising a little above the head, conniving at the tips; joints indistinct. Antennæ of the male with very short laminae, those of the female slightly dentated. Hind tibiæ slightly tumid in both sexes. Wings dentated, angular, with a straight line extending from a pale costal spot. Fore wings falcate at the tips in the male, terminated by a long point in the female.

This genus should perhaps be united to *Charodes*.

## 1. EUTRAPELA CLEMATARIA.

Albido-testacea, ochraceo plus minusve strigata et suffusa; caput supra nigrum; alæ linea recta obliqua albida, puncto discali nigro; antice apice subpurpurascens, linea costam versus angulata.

*Phalaena Clemataria*, Abbot, *Lep. Ins. Georg.* ii. 201, pl. 101.

*Eutrapela acuta Clemataria*, Hübn. *Samml. Exot. Schm.* i. *Lep. v. Geometrae*, i. *Amplæ*, v. *Eutrapelæ*, B. *Acutæ*, b, 11-4.

*Eugonia Clemataria*, Hübn. Verz. Schm. 292, 2827.

*Eutrapela Clemataria*, Guen. Phal. i. 47, 42.

*a—c.* Trenton Falls, New York. Presented by E. Doubleday, Esq.  
*f.* Orilla, West Canada. From Mr. Bush's collection.

## Genus 8. MUCRONODES.

*Æm.* Corpus sat robustum. Caput non prominens; vertex angustus; frons plana. Proboscis robusta. Palporum articulus 2us crassus, velutinus, subascendens; 3us brevis, frontem vix superans. Antennæ setacæ. Abdomen apice acutum; oviductus producta. Tarsi spinosi. Alæ patulæ, linea tenui recta; antica valde acutæ, macula costali alba; posticæ margine exteriori flexa. *Mucronodes*, Guen. Phal. i. 47.

*Female.* Body rather robust. Head not prominent; vertex narrow; front flattened. Proboscis stout. Palpi with the second joint thick, velvety, slightly ascending; third short, hardly rising above the front. Antennæ setaceous. Abdomen with an acute point; oviduct rather prominent. Tarsi spinose. Wings very ample, with a slender straight line extending from a white costal spot; a prominent discal point. Fore wings very acute. Hind wings with the exterior border bent.

### 1. MUCRONODES PHYLLATA.

*Æm.* *Cervina*; alæ linea recta pallide ochraceo-flava fusco marginata, puncto discali nigro, linea subtus violaceo-cinerea puncta alba includente, macula apicali subtus magna alba margine exteriori angulato; anticæ falcatae, linea apud costam flexa, macula costali nivea.

*Mucronodes Phyllata*, Guen. Phal. i. 48, 43.

Brazil.

### 2. MUCRONODES OBRUNDATA.

*Æm.* *Rufescente-cervina*; abdomen supra fulvum; alæ linea obliqua recta flava intus rufo marginata, fimbria rufescenti; anticæ falcatae, acutæ, litura costali subapicali nigra, margine exteriori convexo; posticæ angulo interiore bene determinata.

*Mucronodes obrundata*, Guen. Phal. i. 48, 44, pl. 4, f. 7.

Brazil.

## 3. MUCAONODES MUNDIPENNATA.

**Fam.** *Ochraceo-cervina*; *palpi ascendentes, brevissimi*; *ala nigro subpunctata, fusco substrigata, linea recta obliqua testacea intus cervino marginata*; *anticae valde falcatae, linea costam versus angulata, linea interiore recta non obliqua extus cervino marginata, costa subconvexa, margine exteriori subobliquo fere recto*; *posticae margine exteriori convexo*.

**Female.** Ochraceous fawn-colour. Palpi very short, applied to the face; third joint very minute. Wings with black points and little brown transverse streaks which are almost obsolete above, except towards the base and along the costa; a straight oblique testaceous line bordered on the inner side with fawn-colour of a slightly deeper hue than the ground colour of the wings; under side cinereous-tinged; line brown, denticulate, slightly diffuse. Fore wings very falcate; line forming a slightly acute angle near the costa, between which and the angle it is wholly fawn-colour; an interior straight upright line bordered with fawn-colour on the outer side; costa slightly convex; exterior border slightly oblique, almost straight. Hind wings with the exterior border convex; interior angle somewhat prolonged. Length of the body 9 lines; of the wings 26 lines.

**c. Spirito Santa.** From Mr. Bates' collection.

## Genus 9. CIMICODES.

**Corpus compressum.** Palpi frontem vix superantes; articulus 3<sup>us</sup> minimus, vix conspicuus. Antennae cylindricae, non ciliatae. Abdomen alis posticis superatum. Pedes tibiis longis tumidis. Alae integrae, obscurae, puncto discali elevato; anticae acutae, falcatae, lineis duabus parallelis, costa pallida, margine exteriori convexo; posticae non angulatae, unilineatae, margine exteriori subfere, angulo interiore acuto.

*Cimicodes*, *Guen. Phal. i. 49.*

**Body compressed.** Palpi hardly rising above the front; third joint extremely small, hardly visible. Antennae cylindrical, not ciliated. Abdomen not extending so far as the hind wings. Legs with long and tumid tibiae. Wings entire, dull-coloured, with an elevated discal point. Fore wings acute, falcate, with two parallel

vertical lines, pale along the costa; exterior border convex. Hind wings not angular, with one line; exterior border slightly bent; interior angle acute.

### South America.

#### A. Alæ anticæ costa albida.

##### A. Alæ lineis marginatis.

A. Alæ lineis non parallelis. - - - pallicostata, Guen.

B. Alæ lineis parallelis. - - - nigroliturata, Guen.

B. Alæ lineis vix marginatis. - - - latata, Guen.

#### B. Alæ anticæ costa non albida.

##### A. Alæ non flavæ.

A. Alæ anticæ ochraceo maculatæ. - - - Clisthena, Cram.

B. Alæ anticæ ochraceo non maculatæ. - - - transvolutata, Walk.

B. Alæ flavæ. - - - torquataria, Walk.

### 1. CIMICODES PALLICOSTATA.

Mas. *Pallide fuscescente-cinerea; alæ linea submarginali tremula albida valde abbreviata; anticæ costa albida nigro conspersa, lineis duabus pallide fuscis ochraceo-albo marginatis; posticæ linea una, puncto discali nigro.*

*Cimicodes pallicostata*, Guen. *Phal.* i. 49, 45.

Brazil.

### 2. CIMICODES NIGROLITURATA.

Mas. *C. pallicostatæ simillima, major, obscurior; alæ antica lituris costalibus plus determinatis, lineis parallelis, macula discali nigra rotundata sat magna; posticæ margine exteriori magis flexo.*

*Cimicodes nigroliturata*, Guen. *Phal.* i. 49, 46.

Brazil.

### 3. CIMICODES LATATA.

Fœm. *C. nigrolituratæ simillima, major; alæ lineis magis determinatis ferrugineo-fuscis vix marginatis; anticæ magis falcata, costa saturatiore, macula nulla nigra, linea submarginali dentata subobsoleta.*

*Cimicodes latata*, Guen. *Phal.* i. 50, 47.

Rio Janeiro.

#### 4. CIMICODES CLISTHENA.

*Ochraceæ*; *alæ anticæ fusæ, nigro conspersæ, costæ, fasciis duabus obliquis rectis parallelis rufo marginatis maculaque trigona subapicali ochraceis, lineæ submarginali interrupta nigra, costæ subconvexa; posticæ nigro conspersæ, basi fasciæque subinterrupta ferrugineo-rufis.*

*Phalena-Geometra Clisthena*, Cram. *Pap. Exot.* iv. 228, pl. 397, f. 2.

*Cimicodes Clisthenata*, Guen. *Phal.* i. 50, 48.

Barinas.

#### 5. CIMICODES TORQUATARIA.

*Fem. Flava, robusta, subtus fusco maculata; caput supra ferrugineum; antennæ subcrenulatæ; thorax anticus purpurascens fasciatus; alæ anticæ subfalcatæ, extus ferrugineo conspersæ, fasciis duabus latis subpurpurascens, lineis duabus fuscis costam versus angulatis et retractis, litura apicali alba, margine exteriori valde convexo antice subconcavo; posticæ subtus ferrugineo guttatæ.*

*Female.* Yellow, stout, much brighter beneath. Body beneath and legs with brown spots. Head ferruginous above. Palpi ferruginous, stout, obliquely ascending, not rising higher than the vertex; third joint extremely minute. Antennæ minutely crenulated. Thorax with a purplish band in front. Hind tibiæ not thickened. Wings broad. Fore wings subfalcate, with two broad irregular somewhat lilac bands; first band mostly enclosed by two brown lines, which are acutely angular and retracted towards the costa, the latter somewhat darker than the bands; space between the inner band and the exterior border ferruginous-speckled; exterior border very convex, slightly concave behind the rather prominent tip, which has an adjoining white mark, the latter being more conspicuous beneath where the wings are mostly clouded with a deep ferruginous hue. Hind wings beneath with many ferruginous dots and points; exterior border very convex. Length of the body 8 lines; of the wings 22 lines.

*v. Venezuela.* From Mr. Dyson's collection.

## 6. CIMICODES TRANSVOLUTATA.

**Fœm.** *Murina, vix robusta; caput supra et thorax anticus rufescente-ferruginea; abdomen tumidum, breviusculum, oviductu producto ciliato; pedes rufescentes, fusco conspersi, tibiis posticis vix incrassatis; alæ amplæ, ferrugineo-fusce, glauco suffusæ, puncto discali nigro; anticæ falcatæ, lineis quatuor arcuatis obscuris glauco marginatis, costa subtus testacea extus subconcava, margine exteriori valde convexo; posticæ abdomen longe superantes, linea una distincta, punctis exterioribus elongatis albidis.*

**Female.** Mouse-colour, hardly stout, glaucous-ferruginous beneath. Head above and fore part of the thorax reddish ferruginous. Palpi short, ascending, with reddish bands, not rising so high as the vertex; third joint conical, very minute. Antennæ simple. Abdomen rather short, somewhat tumid, except towards the base; oviduct exerted, compressed, ciliated on each side. Legs reddish, bare, brown-speckled; hind tibiæ hardly thickened. Wings ample, ferruginous-brown, glaucous-tinged; a black discal point; under side glaucous-cinereous, reddish exteriorly. Fore-wings with four curved deeper-coloured glaucous-bordered lines; costa testaceous beneath, slightly concave exteriorly with the exception of the falcate prominent testaceous brown-speckled tips; exterior border very convex. Hind wings extending far beyond the abdomen, with one distinct line, and with some elongated whitish points on the veins between the line and the convex exterior border; interior angle rather prominent. Length of the body  $6\frac{1}{2}$  lines; of the wings 22 lines.

**a.** Brazil. From Mr. Stevens' collection.

## Genus 10. CLYSIA.

**Corpus robustum, subtus pilosum. Frons plana. Palpi lati, ascendentes, læves, squamosi, frontem paullo superantes; articulus 3us brevissimus, truncatus. Antennæ graciles, submoniliformes; articuli ciliati aut subfasciculati. Abdomen alis posticis sæpissime superatum. Pedes robusti; tibiæ posticæ incrassatæ. Alæ latæ, spissæ, strigatæ, nebulosæ, lineis indeterminatis, puncto discali elevato; anticæ acutæ, plus minusve falcatæ, margine exteriori flexo; posticæ angulatæ aut subcaudatæ.**

**Clysia, Guen. Phal. i. 50.**

Body robust, pilose beneath. Front flattened horizontally. Palpi ascending, broad, smooth, squamous, extending a little beyond the front; third joint truncated, extremely short. Antennæ slender, submoniliform, with two ciliæ or a very short tuft on each joint. Abdomen generally not extending as far as the hind wings. Legs robust; hind tibiæ much thickened. Wings broad, stout, streaked, clouded; lines not concise; discal point elevated. Fore wings acute, more or less falcate; exterior border bent. Hind wings angular or slightly caudate.

### South America.

#### A. Alæ macula costali subapicali alba.

##### A. Alæ nigro non maculatæ.

##### a. Alæ anticæ costa non flava.

a. Alæ linea submarginali. - - - comiciata, *Guen.*

b. Alæ punctis submarginalibus. - - - Tasima, *Cram.*

b. Alæ anticæ costa pallide flava. - - - cruraria, *Herr.-Sch.*

B. Alæ nigro maculatæ. - - - pardipennaria, *Walk.*

#### B. Alæ macula nulla costali alba.

##### A. Alæ anticæ margine exteriori inciso.

##### a. Alæ non cineræ.

i. Alæ anticæ macula magna discali. - - - occiduata, *Guen.*

ii. Alæ non maculatæ. - - - succedens, *Walk.*

b. Alæ cineræ. - - - columbipennis, *Walk.*

##### B. Alæ margine exteriori non inciso.

##### a. Alæ testaceæ.

i. Alæ posticæ linea nulla distincta. absconditaria, *Walk.*

ii. Alæ posticæ linea bene determinata. mixtipennaria, *Walk.*

##### b. Alæ pallide cineræ.

i. Alæ margine exteriori angulato. - - - subopalaria, *Walk.*

ii. Alæ margine exteriori convexo. - - - decisaria, *Walk.*

### 1. CLYSIA COMICIATA.

**Fœm.** *Pallide testacea; antennæ tenues, moniliformes, subciliatæ; pedes antici nigro cincti; alæ nigro punctatæ, umbris transversis undatis vagis; anticæ hamatæ, sub apices valde incisæ, margine exteriori angulato antice dentato, linea interiore postice nigricante, linea exteriori viridi-flavo conspersa, macula costali albo-cyanea, umbra media rufescente, submarginali nigra denticulata apud costam alba postice punctiformi;*

*posticæ valde dentatæ, subcaudatæ, lineis tribus, 2a 3aqæ apud venas albo punctatis.*

*Clysia comiciata*, Guen. *Phal.* i. 51, 49.

Brazil.

## 2. CLYSIA CRURARIA.

*Ochraceo-ferruginea; alæ nigro conspersæ, spatio marginali ex parte pallidior, lineis exteriori et submarginali e punctis nigris; anticæ subfalcatæ, disco antico ex parte costaque pallide flavis, macula costali subapicali alba, margine exteriori subangulato; posticæ subcaudatæ.*

*Urapteryx cruraria*, Herr.-Sch. Schmett. *Exot.* f. 198.

*Clysia cruraria*, Guen. *Phal.* i. 51, 50.

Brazil.

## 3. CLYSIA TASIMA.

*Pallide rufescens; alæ subconsersæ, spatio interiore albido, fasciæ subtus glauca informi submarginali, linea media ferruginea, linea exteriori viridescente, punctis submarginalibus nigris, margine exteriori dentato; anticæ acutæ, margine exteriori angulato; posticæ caudatæ.*

*Phalæna Geometra Tasima*, Cram. *Pap. Exot.* iii. 80, pl. 240, f. D, E.

*Paragonia Tasimaria*, Hübn. *Verz. Schm.* 292, 2833.

*Clysia Tasimata*, Guen. *Phal.* i. 52, 51.

Surinam.

This species and *C. comiciata* seem to be identical. A specimen of *C. Tasima* from Rio Janeiro in Mr. Fry's collection has a distinct white costal spot, but agrees with the description of *C. comiciata*, though the submarginal line is wholly composed of points.

## 4. CLYSIA? OCCIDUATA.

*Mas. Saturate violaceo-ferruginea; vertex rufescens, albo marginatus; frons nigro-cinereus; tibiæ posticæ femoribus plus duplo longiores, valde tumidæ, nigro fasciculatæ; alæ nigro notatæ, linea obscura obliqua pallido extus marginata, fimbria ferruginea, margine exteriori flexo non dentato; anticæ macula magna discali ochraceo-flava nigro punctata, incisura subapicali; posticæ spatio discali flavescente.*

*Clysia? occiduata*, Guen. *Phal.* i. 52, 52.

Brazil?



5. *CLYSIA PARDIPENNARIA*.

*Mat.* *Rufescente-cervina*; *caput nigricans*; *antennæ crenulatæ, subciliatæ*; *pedes anteriores nigrificantes, pallido fasciati*; *tibiæ posticæ valde incrassatæ*; *alæ amplæ, nigro maculatæ, lineæ exteriori e punctis paucis albis, lineæ subtus exteriori diffusæ nigrificante, margine exteriori subdentato*; *anticæ apice subquadratæ, macula magna costali subapicali alba nigro marginata*; *posticæ margine exteriori angulato*.

*Male.* Reddish fawn-colour, cinereous-tinged beneath. Head blackish. Antennæ crenulated, minutely ciliated. Anterior legs blackish, with pale bands; hind tibiæ very much incrassated. Wings ample, minutely black-speckled, with several black spots; an exterior line composed of a few white points; submarginal line black, composed of dots in the fore wings, undulating in the hind wings; exterior border very slightly scalloped; under side with a diffuse complete exterior blackish line. Fore wings with a large white black-bordered costal subapical spot; tips subquadrate; anterior border forming a very obtuse angle at a little in front of the middle. Hind wings forming a prominent angle in the middle of the exterior border. Length of the body  $11\frac{1}{2}$  lines; of the wings 28 lines.

*a. Tapayoa.* From Mr. Bates' collection.

6. *CLYSIA SUCCEDENS*.

*Fem.* *Olivaceo-viridis*; *tibiæ anteriores niveo guttatæ, posticæ subtumidæ*; *alæ rufescentes, nigro subconspersæ*; *anticæ subfalcatæ, viridi suffusæ, lineæ interiori arcuata indistincta, puncto discali nigro, lineæ exteriori undulata pallide viriditintus fusco marginata, margine exteriori bis inciso, plaga subtus albida*; *posticæ lineæ exteriori fusca subarcuata, incisuris duabus apud angulum anteriorem, lineis subtus duabus rectis obliquis parallelis viridescens*.

*Female.* Olive green, more ochraceous beneath. Frontal tuft prominent. Palpi obliquely ascending as high as the vertex; third joint elongate-conical. Anterior tibiæ with snow-white dots; hind tibiæ slightly tumid. Wings reddish, very minutely black-speckled. Fore wings subfalcate, with a green tinge, which is most prevalent along the costa; interior line curved, very indistinct; a black discal dot; exterior line pale green, undulating, brown-bordered on the inner side, whitish and nearly straight beneath; exterior border

slightly notched behind the tips, and again behind the middle ; the intermediate part quite straight ; under side with a whitish patch beyond the exterior line. Hind wings with a brown slightly curved exterior line ; two notches by the interior angle ; under side with two straight oblique parallel greenish lines, the exterior one diffusely bordered with whitish on its outer side. Length of the body 1 line ; of the wings 26 lines.

a. Bogotá. From the Entomological Society's collection.

b, c. Bogotá. From Mr. Stevens' collection.

d. Quito. Presented by M. Bourcier.

#### 7. *CLYSIA COLUMBIPENNIS*.

**Fœm.** *Pallide purpurascens-cinerea ; palpi fusco fasciati ; pedes fusco conspersi ; alarum linea interior diffusa valde indistincta puncto discali nigro, fascia subtus lata submarginali cinerea fusca ; antica apice rectangulata, vix falcata, striga inferior flavescens-alba roseo marginata, linea undulata albida, margine exterior angulato ; postica abdomen longe superans linea interior extus albo marginata, striga exterior alba indistincta valde diffusa, margine exterior subrectangulato*

**Female.** Pale dove-coloured cinereous. Palpi obliquely ascending, with brown bands, not rising as high as the front ; the joint conical, very minute. Antennæ slender, simple. Legs speckled with brown. Wings with a very indistinct and somewhat diffuse interior line, which is a little darker than the ground hue ; a black discal point ; under side with a broad submarginal cinereous-brown band. Fore wings rectangular at the tips, hardly falcate, with irregular yellowish white rose-bordered streak, which extends from the first inferior vein to near the end of the interior border ; this is bounded on the inner side by an undulating whitish line, which extends across the wing ; costa speckled with cinereous ; exterior border straight on each side of the obtuse angle, which is at a little distance in front of the middle. Hind wings extending far beyond the abdomen with the interior line bordered with white on its outer side, which hindward there is an indistinct and very diffuse whitish streak along the exterior border forming a nearly right angle, which is somewhat prolonged ; the hind part of the border slightly and diffusely tinged with brown. Length of the body 7 lines ; of the wings 12 lines.

a. Santarem. From Mr. Bates' collection.

8. *CLYSIA ABSCONDITARIA*.

**Mas.** *Testacea; caput supra fuscum; antennæ subserratae, sub-setosae; tibiæ posticae incrassatae; alæ fusco strigatae, purpurascens cinereis nebulosa, puncto discali nigro bene determinato; antica subfalcata, costa convexa, margine exteriori subangulato; postica angulo acuto.*

**Male.** Testaceous. Head above and palpi towards the tips brown. Antennæ minutely serrated and setose. Hind tibiæ incrimated. Wings with minute transverse brown marks, largely shaded with purplish cinereous, which hue forms a band near the base, and occupies nearly all the exterior part; discal point black, distinct, rather large. Fore wings subfalcate; costa convex; exterior border forming a very obtuse angle. Hind wings forming an acute angle, but hardly caudate; interior border pilose. Length of the body 9 lines; of the wings 22 lines.

Rio Janeiro. In Mr. Fry's collection.

9. *CLYSIA MIXTIPENNARIA*.

**Fem.** *Pallide cinerea, nigro aut fusco conspersa; caput supra rufum; pedes anteriores fusco fasciati; tibiæ posticae incrassatae; alæ extus testaceo et ochraceo variae, plaga magna submarginali cinerea, puncto discali nigro albido marginato; antica falcata, costa valde convexa, margine exteriori dentato angulato, lineis interiore et exteriori fuscis denticulatis, hac albido extus submarginata; postica margine exteriori magis dentato subcaudato.*

**Female.** Pale cinereous, black or brown speckled. Head red above. Anterior legs with brown bands; hind tibiæ thickened. Wings testaceous-tinged and slightly ochraceous-tinged exteriorly, each with a large cinereous submarginal patch; discal point black, white-bordered. Fore wings falcate; costa very convex; exterior border dentated, angular in the middle; interior and exterior lines brown, denticulated; the latter more oblique than the former, slightly whitish-bordered on the outer side. Hind wings with the anterior border much more dentate than that of the fore wings, subcaudate in the middle. Length of the body 7 lines; of the wings 20 lines.

a, b. **Eggs.** From Mr. Bates' collection.

## 10. CLYSIA SUBOPALARIA.

**Mas.**—*Alba, sat robusta; palpi subascendentes, subangulati, superius fuscescentes, articulo 3o longi-conico; thorax antice subtestaceus; abdominis latera fasciculata; tibiæ posticæ incrassatæ, alæ subtestaceæ, subopalinae, nigro subconspersæ, lineis tribus obliquis diffusis subundulatis valde indistinctis, punctis exterioribus nigris; anticæ apice rectangulatæ, margine exteriori subangulato; posticæ angulatæ. Fœm?—Palpi articulo 1o longo cylindrico; tibiæ posticæ non incrassatæ, alæ cinere albæ, fusco subconspersæ, fimbria nigro punctata.*

**Male.** White, rather stout. Palpi slightly ascending, brown above, very slightly angular; third joint elongate-conical, about one-third of the length of the second. Antennæ stout. Thorax with a slight testaceous tinge in front. Abdomen with tufts along each side towards the tip, which does not extend beyond the hind wings; anal appendages rather large. Hind tibiæ incrassated. Wings above with a very slight testaceous tinge, slightly and minutely black-speckled, with a slight opaline tinge, which is more prevalent on the under side; three oblique diffuse slightly undulating and very indistinct lines, which are a little darker than the ground hue; a row of exterior black points which are most apparent on the under side. Fore wings rectangular at the tips; exterior border slightly angular, its hind part very oblique. Hind wings with exterior border distinctly angular. Length of the body 9 lines; the wings 20 lines.

**a. St. Domingo.** From Mr. Tweedie's collection.

**Female?** White, rather stout. Palpi angular, slightly ascending, extending rather beyond the head; third joint cylindrical-conical at the tip, nearly as long as the second. Abdomen not extending beyond the hind wings. Hind tibiæ not incrassated. Wings cinereous-white, slightly and very minutely brown-speckled, with indistinct cinereous middle line; two rows of black points, which are most apparent on the under side, where there is a slight opaline tinge. Fore wings subfalcate; exterior border slightly angular, very indistinct interior line. Hind wings like those of the male. Length of the body 8 lines; of the wings 22 lines.

**Rio Janeiro.** In Mr. Fry's collection.

## 11. CLYSIA DECISARIA.

*Mac.* *Albida-testacea, nigro conspersa; palpi subascendentes, articulo 3o parvo conico; antennæ pectinatæ; pedes breviusculi; tibiæ posticæ incrassatæ; alæ puncto discali nigro, linea sub-  
tas ferruginea media undulata; anticæ falcatae, margine  
exteriore subangulato; posticæ incisuris tribus.*

*Male.* Whitish testaceous, speckled with black; the speckles much larger and more conspicuous on the under side, where the testaceous tinge is most prevalent and is ferruginous-speckled. Palpi slightly ascending, projecting rather beyond the head; third joint minute, conical. Antennæ pectinated. Abdomen extending as far as the hind wings; apical appendages rather large. Legs rather short; hind tibiæ incrassated. Wings with a black discal point; under side with a middle undulating ferruginous line. Fore wings falcate; exterior border forming a very obtuse angle. Hind wings truncated at the tips, behind which there are two excavations. Length of the body 9 lines; of the wings 20 lines.

a. — ?

## Genus 11. OXYDIA.

*Corpus robustum. Proboscis valida. Palpi validi, læves, ad frontem applicati; articulus 3us conicus, brevis, distinctus. Antennæ cylindricæ, non ciliatæ. Thorax robustus, villosus. Abdomen maris truncatum, feminae longum apice obtusum. Tarsi spinosi. Alæ spinosæ, scabulosæ, velutinæ, unilineatæ aut bilineatæ; anticæ acutæ, saepe falcatae; posticæ margine exteriore rotundato, angulo interiore plus minusve determinato.*

*Oxydia, Guen. Phal. i. 52.*

Body robust. Proboscis stout. Palpi stout, smooth, applied to the front; third joint, conical, short, distinct. Antennæ cylindrical, not ciliated. Thorax robust, villose. Abdomen conical in the male, long and obtuse at the tip in the female. Tarsi spinose. Wings thick, clouded, velvety, with one or two lines. Fore wings spinose, often falcate. Hind wings with the exterior border rounded; anterior angle more or less produced.

## Mexico.

## 1. OXYDIA MEXICATA.

**Mas.** *Olivaceo-cinerea; alæ purpurascente tinctæ, pallido strigatæ, linea tenui obliqua subflexuosa; anticæ striga costali apicali, linea interiore undulata, macula postica pallida, margine exteriori recto non falcato; posticæ magis olivaceæ, subtus pallide cinereæ, linea media valde arcuata.*

*Oxydia Mexicata, Guen. Phal. i. 57, 63.*

Orizaba, Mexico.

## 2. OXYDIA CLARATA.

**Mas.** *Nigro-fusca; alæ olivaceo subtinctæ, linea recta testaceo-bene determinata, macula apud angulum interiorem punctatâ nonnullis olivaceis; anticæ macula apicali pallide olivaceo-viridi fusco notata albo interstrigata subtus alba.*

*Oxydia Clarata, Guen. Phal. i. 57, 64.*

Cordova, Mexico.

## South America.

## A. Statura non bombyciformis.

## A. Alæ non nitentes.

Δ. Alæ anticæ macula costali apicali. *vulpecularia, Herr.-i.*

Β. Alæ anticæ macula costali non apicali.

α. Alæ non lineatæ.

i. Alæ anticæ subfalcatæ.

\* Alæ flavescens-cervinæ. - *capnodiata, G.*

\*\* Alæ cinereo-testaceæ, aut olivaceæ.

† Tibiæ posticæ non longissimæ. - *bendiata, G.*

†† Tibiæ posticæ longissimæ. - *testinata, G.*

ii. Alæ anticæ falcatæ.

\* Palpi articulo 3o non longo. - *vinosata, G.*

\*\* Palpi articulo 3o longo - *declinata, G.*

b. Alæ lineatæ.

i. Alæ linea interiore flexuosa. - *trychiata, G.*

ii. Alæ linea interiore recta. - *trapezata, G.*

## B. Alæ subnitentes.

Δ. Alæ margine exteriori convexo. - *mixtata, G.*

Β. Alæ margine exteriori subconcavo. - *mundata, G.*

## C. Alæ nitentes.

## A. Alæ linea albo non punctata.

a. Alæ extus non pallidiores. - - - Apidania, Cram.

b. Alæ extus pallidiores. - - - noctuitaria, Walk.

a. Alæ linea albo punctata. - - - hispata, Guen.

## B. Statara bombyciformis.

## A. Alæ anticæ non aut vix falcatæ.

A. Tibiæ posticæ valde incrassatæ. - - - Peosinata, Guen.

a. Tibiæ posticæ non valde incrassatæ.

a. Alæ punctis nullis exterioribus.

i. Alæ anticæ macula nulla costali. - - - distichata, Guen.

ii. Alæ anticæ macula costali. - - - nimbata, Guen.

b. Alæ punctis exterioribus. - - - Vesulia, Cram.

## B. Alæ anticæ falcatæ.

A. Alæ anticæ apice obtusæ. - - - palynata, Guen.

a. Alæ anticæ apice acutæ.

a. Alæ anticæ apice non convolutæ.

i. Alæ anticæ valde falcatæ. - - - platypterata, Guen.

ii. Alæ anticæ non valde falcatæ.

\* Alæ posticæ macula nulla discali. saturniata, Guen.

\*\* Alæ posticæ macula magna discali. agliata, Guen.

b. Alæ anticæ apice subconvolutæ. - - - gastropachata, Guen.

## 3. OXYDIA VULPECULARIA.

*Saturatæ ochraceæ, subtus flavescens; alæ nigro conspersæ, spatio marginali subtus cinerascens-cervino; anticæ subfalcatæ, basi fasciæque latissima postice abbreviata flavis ochraceo punctatis, macula costali apicali elongata cinerea glauco marginata.*

*Anemia Vulpecularia, Herr.-Sch. Exot. Schm. 44, f. 349.*

*Oxydia Vulpecularia, Guen. Phal. i. 54, 53.*

a. Brazil. From Mr. Stevens' collection.

## 4. OXYDIA CAPNODIATA.

*Mes. Pallide flavescens-cervina; alæ punctis apud venas submarginatibus nigris albo notatis; anticæ apice vix sinuatæ, macula costali subapicali alba semilunata fusco strigata, macula discali cinerea nigro punctata, maculis duabus posticis cineris, lineis duabus indistinctis, 1a arcuata, 2a punctiformi.*

*Oxydia Capnodiata*, Guen. *Phal.* i. 54, 54.

Brazil.

#### 5. OXYDIA BENDIATA.

Mas et fœm. *Cinerascente aut olivaceo-testacea ; alæ conspersæ, lituris vix determinatis ; anticæ subfalcatæ, lineis tribus nigro-fuscis, 1a 2aque interruptis, 2a 3aque postice connexis, 3a antice abbreviata, punctis duobus discalibus nigris, macula costali subapicali alba ; posticæ lineis transversis valde incompletis.*

*Oxydia bendiata*, Guen. *Phal.* i. 54, 55, pl. 4, f. 4.

Brazil.

#### 6. OXYDIA TESTINATA.

Mas. *Pallide olivacea ; O. bendiatae statura ; tibiæ posticæ longissimæ, valde tumidæ ; alæ nigricante nebulosæ et conspersæ, lituris nullis bene determinatis ; anticæ macula costali subapicali postice incisa nigro marginata antice albo notata, lineis duabus vagis parallelis.*

*Oxydia testinata*, Guen. *Phal.* i. 55, 56.

Brazil.

#### 7. OXYDIA VINOSATA.

Fœm. *Roseo-cinerea, O. testinatae statura ; alæ spatio medi saturatiore, linea recta extus cinerascente marginata, puncto discali nigro ; anticæ macula costali subapicali trigona cinerea punctis anticis albis ; fasciculus frontalis apice albus ; antennarum basi albæ.*

*Oxydia vinosata*, Guen. *Phal.* i. 55, 57.

Brazil.

#### 8. OXYDIA DECLINATA.

Fœm. *Pallide fusca ; palporum articulus 3us longiusculus ; alæ violaceo tinctæ, macula discali albo cinerea nigro punctata ; anticæ falcatæ, macula costali subapicali ochracea magna semilunata fusco conspersa postice truncata, maculis duabus apud marginem interiorem e atomis albo-cinereis, lineis duabus nebulosis valde indistinctis.*

*Oxydia declinata*, Guen. *Phal.* i. 55, 58.

Brazil.



## 9. OXYDIA TRYCHIATA.

Mas. *O. trapezata* valde affinis, paullo minor; alæ lineis tenuioribus ochraceo marginatis, 1a flexuosa, 2a antice magis remota; posticæ magis rotundatæ, minus trigonæ.

*Oxydia trychiata*, Guen. *Phal.* i. 56, 59.

Brazil.

## 10. OXYDIA TRAPEZATA.

Mas. *Pallide flavescens-fusca*; alæ strigatæ, fimbria fusca apice alba; anticæ apice quadratæ, costa apice valde convexa, lineis duabus fuscis obliquis sat approximatis, 1a recta, 2a flexa; posticæ trigonæ, linea una recta obliqua, margine exteriori rotundato.

*Oxydia trapezata*, Guen. *Phal.* i. 56, 60.

Brazil.

## 11. OXYDIA MIXTATA.

Mas. *Stramineo-flava*; alæ strigis nigricantibus non obliquis, lineis tribus vagis nebulosis margineque exteriori fuscis, linea interiori subundata fere recta, linea exteriori sinuata dentata, linea submarginuli interrupta, puncto discali nigro; anticæ vix falcatæ, margine exteriori convexo subflexo.

*Oxydia mixtata*, Guen. *Phal.* i. 56, 61.

Brazil.

## 12. OXYDIA MUNDATA.

Mas. *Ochraceo-straminea*; tibiæ posticæ incrassatæ; alæ confertissime strigatæ, linea obliqua fuscescente extus ochraceo marginata, linea submarginali vaga cinerea; anticæ acutæ, subfalcatæ, lineis duabus interioribus cinereis parallelis non obliquis; posticæ linea postica submarginali ochracea.

*Oxydia mundata*, Guen. *Phal.* i. 57, 62, pl. 10, f. 1.

Brazil.

## 13. OXYDIA APIDANIA.

*Olivaceo-fusca*; alæ linea valde obliqua fusca, fascia media latissima obscure ochracea; anticæ subfalcatæ. Var.—Alæ anticæ basi et apud marginem exteriorem fusco strigatæ; posticæ linea submarginali e guttis nigricantibus.

*Phalæna-Geometra Apidania*, *Cram Pap. Exot.* iii. 103, pl. 251, f. C, D.

*Oxydia Apidaniata*, *Guen. Phal.* i. 58, 66.

Surinam.

#### 14. OXYDIA HISPATA.

*Mas.* *Fusco-cinerea*; *tibiæ posticæ unicolores, subtumidæ*; *alæ olivaceo nitentes, linea fusca recta albo punctata*; *anticæ subfalcatæ, basi subnebulosæ, puncto discali nigro, striga costali apice subtus albo notata, incisura subapicali, margine exteriori convexo.*

*Oxydia hispata*, *Guen. Phal.* i. 58, 66.

Brazil.

#### 15. OXYDIA NOCTUITARIA.

*Mas.* *Olivaceo-fusca*; *palpi breves, oblique ascendentes, articuli 3o minimo*; *antennæ validæ*; *tibiæ posticæ incrassatæ*; *alæ nitentes, amplæ, linea obscuriore recta obliqua extus cinerea marginata, fasciis duabus exterioribus cinereis*; *anticæ subfalcatæ, linea apicem versus abrupte angulata, margine exteriori recto sat obliquo, fasciis duabus interioribus nigricantibus valde diffusis*; *posticæ angulo interiore bene determinata.*

*Male.* Olive-brown, mostly cinereous beneath. Palpi obliquely ascending, not rising so high as the vertex; third joint extremely minute. Antennæ stout. Abdomen not extending so far as the hind wings. Hind tibiæ incrassated. Wings shining, ample, with a darker straight oblique line, which is bordered with cinereous on the outer side, and has two cinereous bands between it and the exterior border. Fore wings subfalcate; exterior border straight, rather oblique; line retracted and forming a very acute angle near the tip; two interior very diffuse blackish bands. Hind wings with the interior angle rather prominent. Length of the body 9 lines; of the wings 24 lines.

Rio Janeiro. In Mr. Fry's collection.

#### 16. OXYDIA PROSINATA.

*Mas.* *Violaceo-cinerea*; *tibiæ posticæ incrassatæ, nigro notatæ*; *alæ conspersæ, margine pallidiore, linea fusco recta albo punctata*; *anticæ subfalcatæ, striga costali subapicali bidentata.*

*nigra albo extus rufoque intus marginata; posticæ macula nigra subrotundata.*

*Oxydia Peosinata*, Guen. *Phal.* i. 59, 67.

Brazil.

#### 17. OXYDIA DISTICHATA.

*Mas. Testaceo-cinerea; tibiæ posticæ tumidæ; alæ nigro conspersæ, linea fusca recta bene determinata, spatio exteriori pallidiore; anticæ vix falcatæ, puncto discali nigro, margine exteriori subrecto; posticæ macula nigra magna oblonga.*

*Oxydia distichata*, Guen. *Phal.* i. 59, 68.

Brazil.

#### 18. OXYDIA NIMBATA.

*O. Vesuliatæ similis, paullo minor; alæ obscuriores, atomis nigris magis conspersæ, fere olivaceo-fuscæ, linea conspicua; anticæ macula costali subapicali rufescente.*

*Oxydia nimbata*, Guen. *Phal.* i. 59, 69.

Rio Janeiro.

#### 19. OXYDIA VESULIA.

*Ochraceo-alba; alæ nigro conspersæ, cinereo nebulosa, linea indistincta cinerea; anticæ vix falcatæ, umbris duabus discalibus parallelis angulosis nigris, margine exteriori perobliquo; posticæ plaga subcostali nigra.*

*Phalæna-Geometra Vesulia*, Cram. *Pap. Exot.* iii. 79, pl. 240, f. B, C.

*Oxydia Vesuliata*, Guen. *Phal.* i. 60, 70.

Surinam. Cayenne.

#### 20. OXYDIA PALYNATA.

*Fœm. Fuscescente-cinerea; pedes antici albo nigroque cincti; alæ ex parte nigro strigatæ, linea recta rosea fusco nebulosa; anticæ falcatæ, apice obtusæ, strigis duabus costalibus obliquis fuscis, strigis duabus albis, una apicali, altera subapicali, macula antica duplicata nigra, maculis duabus aut tribus discalibus semihyalinis.*

*Oxydia Palynata*, Guen. *Phal.* i. 60, 71.

Brazil?

## 21. OXYDIA SATURNIATA.

*Fœm.* *Pallide ochraceo-flava; alæ vix strigatæ, linea pallidior subrecta subnebuloso marginata, fimbria saturate fuscescente; anticæ falcatæ, acutæ, puncto discali nigro; posticæ lineâ submarginali angulosa vix determinata e atomis nigricantibus.*

*Oxydia Saturniata*, Guen. *Phal.* i. 61, 72.

Brazil?

## 22. OXYDIA PLATYPTERATA.

*Flavescens; alæ nigro conspersæ, cinereo ex parte suffusæ, linea recta obliqua ochracea, colore subtus saturatiore; anticæ valde falcatæ, puncto discali nigro, linea interiore angulata ferrugineâ; posticæ gutta subtus discali atra.*

*Oxydia platyptera*, Guen. *Phal.* i. 61, 73, pl. 4, f. 3.

a. Brazil. From Mr. Stevens' collection.

## 23. OXYDIA AGLIATA.

*Testaceo-cinerea, aut testacea; caput supra niveum; palpi apici nigri; alæ nigro conspersæ, purpurascente suffusæ, linea recta obliqua ferruginea extus albido marginata, linea subtus exteriore e guttis nigris; anticæ valde falcatæ, linea submarginali undulata indistincta diffusa, fascia media diffusa fuscescente, puncto discali nigro, spatio apicali subtus albido, macula subtus postica nigra; posticæ plaga antica nigra. Var. β.—Alæ linea albida. Var. γ.—Alæ linea olivaceo-ochracea apud alas anticâs intus valde diffusa.*

*Oxydia agliata*, Guen. *Phal.* i. 62, 74.

a—c. St. Domingo. From Mr. Tweedie's collection.

d. Jamaica. From Mr. Gosse's collection.

*Var. Female.* Pale ochraceous, minutely but rather thickly black-speckled, whitish beneath. Head hardly white between the antennæ. Wings beneath with an ochraceous submarginal denticulate band, which in the fore wings is bordered on the outer side with black speckles. Fore wings with a black discal point; line ferruginous, forming an extremely acute angle near the costa; interna

line obsolete, except in front. Hind wings with a brown line; exterior patch composed of confluent black speckles.

c. ———? Presented by J. G. Children, Esq.

*Male.* Ochraceous, testaceous beneath. Wings beneath with transverse brown streaks; marginal space darker, diffusedly purplish-bordered along its inner side; discal point brown. Fore wings hardly falcate; interior line and costal subapical mark purple; exterior line ochraceous, very indistinct. Smaller than the female.

f. St. Domingo. From Mr. Tweedie's collection.

#### 24. OXYDIA GASTROPACHATA.

*Form.* Testacea; alæ nigricante strigatæ, linea ferruginea concisa, fimbria fusca; antice apice valde producta, subspatulata, spatio medio pallide fuscescente-cinereo; postice rotundata, linea fusca arcuata.

*Oxydia gastropachata*, Guen. *Phal.* i. 62, 75.

Brasil.

#### Genus 12. CYCLIDIA.

Corpus gracile. Proboscis brevis, robusta. Palpi graciles, arcuati, ascendentes, frontem vix superantes; articulus 3us brevis, maris conicus, scem. truncatus. Antennæ breves, robustæ, compressæ, velutinæ, non ciliatæ. Thorax globosus. Abdomen crassum, cylindrico-conicum. Pedes breves, crassi, squamoso-villosi; tibiæ femoribus vix longiores, posticæ fusiformes calcaribus robustis approximatis. Alæ spissæ, velutinæ, integræ, macula discali magna rotundata; antice acutæ, subfalcatæ; posticæ subtrigonæ, non emdatæ, angulis rotundatis.

*Cyclidia*, Guen. *Phal.* i. 62.

Eschen, Hübn. Zutr.

Body slender. Proboscis short, stout. Palpi slender, curved, ascending, remote from each other, applied to the front and hardly rising above it; third joint short, conical in the male, truncated in the female. Antennæ short, stout, laterally compressed, minutely pubescent, without ciliæ. Thorax globose. Abdomen thick, cylindrical-conical. Legs short, thick, with squamous hairs; tibiæ hardly

longer than the femora; hind tibiæ fusiform, with robust and approximate spurs. Wings thick, velvety, entire, with a large rounded discal spot. Fore wings acute, subfalcate. Hind wings nearly triangular; angles rounded, not caudiform.

### 1. CYCLIDIA SUBSTIGMARIA.

*Alba; caput supra nigricans; alæ fasciis lineisque dentatis, guttis submarginalibus nigris; anticæ plaga apicali fusca, macula discali alba; posticæ macula discali nigra.*

*Euchera substigmara* (*Geometra tenuis*, *Spilota ornata*), Hübn. *Zutr. Exot. Schm.* 29, 260, f. 519, 520.

*Cyclidia substigmara*, Guen. *Phal.* i. 63, 76.

*a, b.* Nepaul. Presented by Major-General Hardwicke.

*c, d.* Silhet. From the Rev. J. Stainforth's collection.

*e—g.* North China. From Mr. Fortune's collection.

*h.* Landoor. Presented by General Hearsay.

*i.* ———?

### 2. CYCLIDIA ORCIFERARIA.

*Fœm. Nigricante-fusca; alæ lineis tribus exterioribus punctosis approximatis denticulatis purpurascente-cinereis, linea interiore dentata valde indistincta et incompleta, spatio exteriori subtus cinereo.*

*Female.* Blackish brown, rather paler beneath. Wings with three approximate exterior denticulated purplish cinereous lines composed of speckles, and having the spaces between them more thinly speckled; there are also a few speckles on the wings elsewhere, and some of them form a very indistinct and incomplete dentated interior line; under side with more than the exterior third part cinereous. Fore wings more falcate and more elongated than those of *C. substigmara*, and with the exterior border much more oblique. Hind wings with the apical part much more rounded than that of *C. substigmara*. Length of the body 10 lines; of the wings 34 lines.

*a.* North China. From Mr. Fortune's collection.

## Genus 13. ANDANIA.

*Mas et fem.* Corpus sat gracile. Proboscis brevis, gracilis. Palpi porrecti, graciles, caput paullo superantes; articulus 3us cylindricus, 2o paullo brevior. Antennæ sat robustæ, subcompressæ. Pedes breviusculi; femora pilosa; tibiæ posticæ subincrassatæ. Alæ amplæ; anticæ falcatæ; posticæ biangulatæ, apud angulum anteriorem valde incisæ. *Mas.*—Antennæ crenulatæ. Abdomen valvulis duabus longis apicalibus lateralibus fasciculatis. *Fem.*—Abdomen breve.

*Male and female.* Body rather slender. Front not prominent. Proboscis short, slender. Palpi porrect, slender, extending a little beyond the head; third joint cylindrical, more slender and a little shorter than the second. Antennæ rather stout, somewhat compressed. Legs rather short; femora pilose; hind tibiæ slightly thickened. Wings ample, alike in colour. Fore wings falcate. Hind wings with two very acute angles hindward, forming two minute tails, deeply excavated by the interior angle. *Male.*—Antennæ crenulate, stouter than those of the female. Abdomen with two long anal lateral tufted valves, extending almost as far as the hind wings. *Female.*—Abdomen much shorter than that of the male.

This genus has some resemblance to the *Macaridæ*, and its palpi differ much from those of the *Urapteridæ*, though it is allied to *Urapteryx*.

## 1. ANDANIA SCITOSIGNATA.

*Mas et fem.* Cinereo-ferruginea aut cinerea; alæ purpurascente tinctæ, nigricante aut fusco conspersæ, lineis duabus albidis, 1a recta abbreviata, 2a angulata, puncto discali nigro; anticæ costa extus valde convexa, macula exteriori alba discali subtus bene determinata; posticæ lituris marginalibus atris, fascia subtus nigra abbreviata nonnunquam obsoleta.

*Male and female.* Ferruginous, with a cinereous tinge, or wholly cinereous. Wings purplish tinged, blackish or brown-speckled, with two whitish lines; interior line straight, abbreviated in front; exterior line acutely angular in the middle; an indistinct black discal point. Fore wings with the costa very convex externally; under side with a white exterior discal spot, which is generally more or less apparent on the upper side. Hind wings

with the angle of the exterior line much longer than that of the fore wings, but very variable in length; some deep black marks on the angular part of the exterior border; under side with an abbreviated black band, which is occasionally obsolete. *Male*.—Exterior border of the fore wings slightly concave, more oblique than that of the female, which is straight. Length of the body 6—8 lines; of the wings 18—20 lines.

The six specimens here recorded form three races or subspecies. The Santarem variety has the angle of the exterior line much longer than that of the Venezuela variety, and differs still more in this character from the third variety in which the hind wings have no band on the under side.

*a—c.* Venezuela. From Mr. Dyson's collection.

*d, e.* Santarem. From Mr. Bates' collection.

*f.* Brazil. From Mr. Stevens' collection.

#### Genus 14. LAGYRA.

*Fœm.* Corpus vix robustum. Proboscis obsoleta. Palpi brevissimi; articulus 3us minimus. Antennæ simplices, breviusculæ, sat graciles. Oviductus longus, tubiformis. Pedes breviusculi, sat graciles; calcaria parva. Alæ elongatæ; anticæ valde falcatæ, margine exteriori inciso; posticæ margine exteriori angulato subcaudato.

*Female.* Body hardly stout. Proboscis obsoleta. Palpi extremely short; third joint very minute. Antennæ simple, rather short and slender. Abdomen with a long tubiform oviduct which extends a little beyond the hind wings. Legs rather short and slender; hind tibiæ not dilated; spurs rather short. Wings elongate. Fore wings very falcate; exterior border deeply excavated behind the tip. Hind wings with the exterior border angulate almost caudate.

This genus hardly accords with the characters by which the *Urapterygæ* are defined, but seems to agree more with them than with any other family.



## 1. LAGYRA TALAGA.

**Form.** *Cinereo-fusca ; alæ subglaucescens, lineis duabus aut tribus obliquis indistinctis subundulatis fuscis ; antica obtusa, costa apicem versus convexa, margine exteriori perobliquo subconvexo ; postica subcaudata, vix dentata.*

**Female.** Cinereous-brown. Wings with a slight glaucous tinge, alike in colour, with two or three oblique indistinct slightly undulating brown lines ; under side not paler. Fore wings with the costa convex towards the tip, which is obtuse ; exterior border very oblique, slightly convex. Hind wings with the exterior border very slightly scalloped, forming an acute and almost caudate angle in the middle. Length of the body 9 lines ; of the wings 23 lines.

a. Celebes. From Madame Ida Pfeiffer's collection.

b. Philippine Isles. From Mr. Cuming's collection.

c. Ceylon. From Mr. Stevens' collection.

## 2. LAGYRA AGREALESARIA.

**Form.** *Ochraceo-cervina ; palpi brevissimi ; abdomen attenuatum ; oviductus longus, setulosus ; pedes breviusculi, tibiis posticis non dilatatis ; alæ elongatæ, lineis duabus ferrugineis subundulatis, linea interiore valde diffusa, linea exteriori tenui albo subnotata ; antica obtuse falcata, margine exteriori antice excavato postice vix dentato ; postica antice flavescentes, margine exteriori subdentato subangulato.*

**Female.** Ochraceous fawn-colour. Palpi extremely short. Antennæ slender. Abdomen attenuated, with a long slender setulose oviduct, which extends a little beyond the hind wings. Legs rather short ; hind tibiae not dilated. Wings elongate, with two slightly undulating ferruginous lines ; interior line very diffuse ; exterior line slender, slightly and interruptedly white marked. Fore wings obtusely falcate ; exterior border excavated in front, hardly scalloped hindward ; the white on the exterior line more distinct in front, and forming spots ; some traces of a third line near the base. Hind wings yellowish in front ; exterior border slightly dentate and angular. Length of the body 8 lines ; of the wings 22 lines.

a. Java. From the East India Company's collection.

## 3. LAGYRA INFIXARIA.

**Fœm.** *Albido-testacea, ochraceo varia; palpi brevissimi; abdomen alas posticas non superans; tibiæ posticæ graciles; alæ elongatæ, fusco subconspersæ, lineis duabus ochraceis obliquis subrectis subtus lunulatis, linea submarginali diffusa indistincta puncto discali nigro magno, punctis tribus nigris apud angulum interiorem; anticæ falcatæ, margine exteriori antico excavato.*

**Female.** Whitish testaceous, tinged here and there with ochraceous. Antennæ slender. Abdomen attenuated hindward, not extending beyond the hind wings. Hind tibiæ slender. Wings elongate, slightly and minutely speckled with brown; two ochraceous oblique nearly straight lines, which on the under side form lunules between the veins; submarginal line diffuse, indistinct; discal point black, large; three black points near the interior angle. Fore wings falcate, excavated behind the tips; exterior border very oblique. Hind wings with the exterior border slightly bent and scolloped. Length of the body 7 lines; of the wings 22 lines.

**a.** ———? Presented by E. Doubleday, Esq.

## 4. LAGYRA SUCCESSARIA.

**Fœm.** *Rufescente-cervina, vix cinerascens; antennæ simplices breviusculæ; abdomen alas posticas non superans; alæ elongatæ, lineis duabus obscurioribus obliquis denticulatis subundulatis, umbra intermedia indistincta diffusa, margine exteriori dentato; anticæ falcatæ, apice obtusæ, incisura magna subapicali; posticæ margine exteriori subangulato.*

**Female.** Reddish fawn-colour, with a slight cinereous tinge. Palpi extremely short. Antennæ simple, rather short. Abdomen not extending beyond the hind wings; anal appendages large. Wings elongate, with two denticulate oblique slightly undulating darker lines, between which there is an indistinct and diffuse dark shade; exterior border scolloped. Fore wings falcate, obtuse at tips, behind which they are much excavated. Hind wings with exterior border slightly angular by means of one of the denticulations which is more prominent than the rest. Length of body 7 lines; of the wings 22 lines.

It is more allied to *L. indecorana* than to the two other preceding species, but may be distinguished from the former by its colour and by the more indented exterior border of the wings.

Hindustan. In Mr. Saunders' collection.

## Addenda.

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### CHÆRODES ASYLLUSARIA.

*Mas.* *Pallide cervina* ; *caput cinereum* ; *antennæ subpubescentes* ; *thorax antice fuscescens* ; *tibiæ posticæ valde incrassatæ, dense fasciculatæ* ; *alæ strigulis indistinctis obscurioribus, lineâ nigricante subrecta albido interlineata, puncto discali nigro* ; *anticæ vix falcatae, margine exteriori subrecto, fimbria postice alba* ; *posticæ lituris exterioribus elongatis ferrugineis, lineâ marginali alba, cauda distincta purpurascens albo nigro strigata.*

*Male.* Pale fawn-colour, tinged with whitish beneath. Head *cinereous* above. *Antennæ* minutely pubescent. Fore border of the thorax brownish. Legs speckled ; hind tibiæ much incrassated, furnished with a thick tuft of hairs. Wings with indistinct darker minute transverse streaks ; line blackish, nearly straight, interlined with whitish, obsolete towards the tips of the fore wings ; a minute discal point. Fore wings hardly falcate ; exterior border almost straight ; fringe white hindward. Hind wings with some exterior elongated ferruginous marks ; an incomplete white line along the exterior border, which has a distinct rounded tail ; the latter purplish white with black streaks. Length of the body 7 lines ; of the wings 22 lines

It is closely allied in most of its characters to some of the species of *Urapteryx*.

Brazil. In Mr. Saunders' collection.

## 3. LAGYRA INFIXARIA.

**Fœm.** *Albido-testacea, ochraceo varia; palpi brevissimi; abdomen alas posticas non superans; tibiæ posticæ graciles; alæ elongatæ, fusco subconspersæ, lineis duabus ochraceis obliquis subrectis subtus lunulatis, linea submarginali diffusa indistincta, puncto discali nigro magno, punctis tribus nigris apud angulum interiorem; anticæ falcatæ, margine exteriori antico cavato.*

**Female.** Whitish testaceous, tinged here and there with ochraceous. Antennæ slender. Abdomen attenuated hindward, not extending beyond the hind wings. Hind tibiæ slender. Wings elongate, slightly and minutely speckled with brown; two ochraceous oblique nearly straight lines, which on the under side form lunules between the veins; submarginal line diffuse, indistinct; discal point black, large; three black points near the interior angle. Fore wings falcate, excavated behind the tips; exterior border very oblique. Hind wings with the exterior border slightly bent and scolloped. Length of the body 7 lines; of the wings 22 lines.

**a.** ———? Presented by E. Doubleday, Esq.

## 4. LAGYRA SUCCESSARIA.

**Fœm.** *Rufescente-cervina, vix cinerascens; antennæ simpliciter breviusculæ; abdomen alas posticas non superans; alæ elongatæ, lineis duabus obscurioribus obliquis denticulatis subundulatis, umbra intermedia indistincta diffusa, margine exteriori dentato; anticæ falcatæ, apice obtusæ, incisura magna subapicali; posticæ margine exteriori subangulato.*

**Female.** Reddish fawn-colour, with a slight cinereous tinge. Palpi extremely short. Antennæ simple, rather short. Abdomen not extending beyond the hind wings; anal appendages large. Wings elongate, with two denticulate oblique slightly undulating darker lines, between which there is an indistinct and diffuse darker shade; exterior border scolloped. Fore wings falcate, obtuse at the tips, behind which they are much excavated. Hind wings with the exterior border slightly angular by means of one of the denticulations which is more prominent than the rest. Length of the body 7 lines; of the wings 22 lines.

white point near the costa, where it is abruptly bent outward and assumes a white hue and is zigzag; a black whitish-bordered dot near the costa between the lines. Hind wings with the line bordered with ferruginous on the inner side, marked with a black point near the costa. Length of the body 8 lines; of the wings 20 lines.

Amazon Region. In Mr. Saunders' collection.

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OXYDIA AGLIATA.

Var. Mas. *Obscure olivaceo-fusca; alæ linea nigricante-fusca, spatium exterius pallidius glaucescente suffuso.*

Var. Fœm. *Subolivaceo-ochracea; alæ linea fusca extus pallido marginata; anticae subtilius nigro non plagiatae.*

Var. Fœm. *Albido-cinerea; alæ subochraceo variæ, nigro subtilius valde conspersæ; anticae subfalcatae.*

Var. Fœm. *Albida; alæ anticae falcatae; posticae plaga nigra parva.*

Var. Male. Dark olive-brown. Wings paler, and with a glaucous tinge beyond the line, which is blackish brown.

It much resembles *O. noctuilaria*, from which it may be distinguished by its more falcate fore wings.

Var. Female. Ochraceous, with a slight olive tinge. Wings hardly paler beyond the line, which is brown, with a paler exterior border. Fore wings more falcate than those of the male; under side with no black patch.

Venezuela. In Mr. Saunders' collection.

Var. Female. Whitish cinereous, slightly and irregularly suffused with ochraceous, much speckled with black on the under side, where there is a distinct black spot near the interior angle of the fore wings; the latter slightly falcate.

Var. Female. Paler than the preceding variety. Fore wings more falcate. Hind wings with a smaller black spot.

Brazil. In Mr. Saunders' collection.

## Page 37.

## MUCRONODES ORICUSARIA.

**Mas.** *Cervina* ; antennæ validæ, nudæ ; tibiæ posticæ subincrassatæ ; alæ nigro subconsersæ, linea obliqua recta, fimbria rufescente albo marginata ; anticæ subfulcatæ, linea rufescente apud costam angulata, linea interiore rufescente non obliqua apud costam angulata, linea exterior angulosa incompleta guttisque nigris ; posticæ linea nigra.

**Male.** Fawn-colour, Third joint of the palpi conical, very minute. Antennæ stout, bare. Abdomen with a rather large apical tuft. Legs cinereous ; hind tibiæ slightly incrassated. Wings slightly streaked with black ; line oblique, straight ; fringe reddish tipped with white. Fore wings subfalcate ; line reddish, forming an angle towards the costa ; interior line straight, upright, reddish also forming an angle near the costa ; an exterior zigzag incomplete black line, accompanied by a few black dots ; some black costal marks. Hind wings with the interior angle produced ; line black. Length of the body 7 lines ; of the wings 18 lines.

Venezuela. In Mr. Saunders' collection.

## Page 38.

## CIMICODES NIGROLITURATA.

**Var.?** *Fœm.* *Cervina* ; thorax antice canus ; alæ linea interiori albida subrecta vix obliqua, macula exterior nigra magna discali, lituris contiguis lanceolatis nigris albo terminatis fimbria ferruginea apice alba ; anticæ falcatae, apice nigro notatae, linea interiore extus ferrugineo marginata costam versus flexa angulosa alba, gutta inter lineas subcostali nigra alba marginata ; posticæ linea intus ferrugineo marginata postice nigro notata.

**Var.?** *Female.* Fawn-colour, cinereous beneath. Head above and fore part of the thorax hoary. Wings with an interior nearly straight and upright whitish line ; a large black exterior discal spot, contiguous to some black lanceolate white-tipped marks ; fringe ferruginous, tipped with white. Fore wings falcate marked with black at the tips ; interior line bordered with ferruginous on the outer side, parallel to an outer whitish line, which is bordered with ferruginous on the inner side, and is marked by

tinged with pale purple. Length of the body 9 lines ; of the wings 22 lines.

Brazil. In Mr. Saunders' collection.

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### LAGYRA SUCCESSARIA.

*Mac.* *Antennæ valde pectinatae, apice simplices ; alæ lineis duabus diffusis undulatis nigricantibus.*

*Male.* Antennæ pectinated except at the tips ; branches long, serrated. Wings with two blackish diffuse undulating lines. Length of the body 6 lines ; of the wings 18 lines.

## Fam. 2. ENNOMIDÆ.

**Corpus robustum.** Caput apud antennas pilosum ; frons globosa, raro fasciculata. Palpi squamoso-hirsuti, recti aut subascendentes, raro longissimi. Antennæ laminis pubescentibus instructæ. Thorax rotundatus, pilosus. Abdomen sericeum, alas posticas non superans, femine crassum ovatum. Pedes non pilosi ; tibiæ posticæ saepe tumidæ. Alæ amplæ, sæpissime dentatæ aut angulatæ, aut incisæ ; anticæ acutæ, sæpissime bilineatæ ; posticæ sæpissime unilineatæ.

Ennomidæ, *Guen. Phal.* i. 64.

Head pilose about the insertion of the antennæ. Front globose, rarely tufted. Palpi squamous-hirsute, rarely very long, straight or slightly ascending. Antennæ moderately long, not convoluted, almost always furnished with pubescent laminæ. Thorax rounded, with pale and fine hairs. Abdomen sericeous, generally extending to the interior angle of the hind wings, thick and ovate in the female. Legs moderately long, not pilose ; fore tibiæ half the length of the fore femora ; hind tibiæ longer than the hind femora, often thickened. Wings ample, almost always dentated, angular or notched. Fore wings acute, generally with two lines. Hind wings most often with one line.

## OXYDIA ALPISCARIA.

**Mas.** *Obscure cervina ; palporum articulus 3us indistinctus ; antennæ subsetulosæ ; tibiæ posticæ valde incrassatæ ; alæ cinereæ valde nebulosæ, linea ferruginea recta obliqua, linea submarginali cinerea indistincta cuneata albo punctata, puncto discali nigro, fascia subtus rufescente undulata submarginali ; antica falcata, linea albo punctata apud costam alba abrupte retracta.*

**Male.** Dull fawn-colour, largely shaded with cinereous, the latter hue is still more prevalent beneath, with the exception of a reddish undulating submarginal band. Head hoary between the eyes. Third joint of the palpi indistinct. Antennæ minutely setulose. Abdomen with a compressed apical tuft. Hind tibiæ minutely incrassated. Wings with a straight oblique ferruginous line ; black discal point ; the cinereous hue forming an indistinct submarginal line, composed of wedges, and slightly marked with white points ; fringe ferruginous. Fore wings falcate ; line marked with white points, acutely retracted and wholly white near the costal angle. Length of the body 9 lines ; of the wings 24 lines.

**Brazil.** In Mr. Saunders' collection.

## OXYDIA CARIARIA.

**Mas.** *Rufa, robusta ; palpi nigricantes, articulo 3o indistincto ; antennæ subsetulosæ ; tibiæ posticæ incrassatæ ; alæ nigre subconsersæ, linea nigra subrecta, fimbria ferruginea, marginis exterioris flexo ; antica vix falcata, linea apud costam flavo albo notata, linea interiore nigra subarcuata vix obliqua, plerumque inter lineas subcostales magna pallide flava, spatio marginali parte purpurascente suffuso.*

**Male.** Red, stout, paler beneath. Palpi blackish ; third joint indistinct. Antennæ minutely setulose. Hind tibiæ incrassated. Wings minutely speckled with black ; line black nearly straight ; fringe ferruginous ; exterior border bent. Fore wings hardly falcate ; line bent and marked with white by the costa ; an interior black line nearly upright but slightly and irregularly curved ; a large subcostal pale yellow patch between the lines, containing a black point ; the latter also apparent on the hind wings ; marginal space pale.



inged with pale purple. Length of the body 9 lines ; of the wings 2 lines.

Brazil. In Mr. Saunders' collection.

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LAGYRA SUCCESSARIA.

*Max.* Antennæ valde pectinatæ, apice simplices ; alæ lineis duabus diffusis undulatis nigricantibus.

*Male.* Antennæ pectinated except at the tips ; branches long, serrated. Wings with two blackish diffuse undulating lines. Length of the body 6 lines ; of the wings 18 lines.

Fam. 2. ENNOMIDÆ.

Corpus robustum. Caput apud antennis pilosum ; frons globosa, raro fasciculata. Palpi squamoso-hirsuti, recti aut subascendentes, raro longissimi. Antennæ laminis pubescentibus instructæ. Thorax rotundatus, pilosus. Abdomen sericeum, alas posticas non superans, femine crassum ovatum. Pedes non pilosi ; tibiæ posticæ sæpe tumidæ. Alæ amplæ, sæpissime dentatæ aut angulatæ, aut incisæ ; anticæ acutæ, sæpissime bilineatæ ; posticæ sæpissime unilineatæ.

Ennomidæ, Guen. *Phal.* i. 64.

Head pilose about the insertion of the antennæ. Front globose, rarely tufted. Palpi squamous-hirsute, rarely very long, straight or slightly ascending. Antennæ moderately long, not convoluted, almost always furnished with pubescent laminæ. Thorax rounded, with pale and fine hairs. Abdomen sericeous, generally extending to the interior angle of the hind wings, thick and ovate in the female. Legs moderately long, not pilose ; fore tibiæ half the length of the fore femora ; hind tibiæ longer than the hind femora, often thickened. Wings ample, almost always dentated, angular or notched. Fore wings acute, generally with two lines. Hind wings most often with one line.

Some of the genera in the *Urapterydæ* are very closely allied to others among the *Ennomidæ*, and the two families seem to form one natural group.

**A. Tibiæ posticæ plus minusve incrassatæ.**

**A. Alæ posticæ non truncatæ.**

**a. Tibiæ anticæ calcaribus parvis.**

**a. Proboscis conspicua.**

i. Alæ anticæ valde incisæ. - 11. *THERAPIS*, Hübn.

ii. Alæ anticæ non valde incisæ.

\* Alæ anticæ margine exteriori non flexo.

† Palpi breves.

‡ Alæ posticæ margine exteriori non angulato.

1. *DREPANODES*, Guen.

‡‡ Alæ posticæ margine exteriori angulato.

44. *HALESA*, Walk.

†† Palpi non breves.

‡ Alæ posticæ margine exteriori flexo.

4. *GYNOPTERYX*, Guen.

‡‡ Alæ posticæ margine exteriori non flexo.

§ Femora postica valde fasciculata.

45. *HERBITA*, Walk.

§§ Femora postica non fasciculata.

46. *BROTIS*, Hübn.

\*\* Alæ anticæ margine exteriori flexo.

† Palporum articulus 3us truncatus.

5. *TETRAGONODES*, Guen.

†† Palporum articulus 3us non truncatus.

‡ Alæ posticæ non incisæ. - 7. *APICIA*, Guen.

‡‡ Alæ posticæ incisæ.

§ Tarsi non spinosi. - 24. *ENDROPIA*, Guen.

§§ Tarsi spinosi. - 29. *TETRAOIS*, Guen.

**b. Proboscis vix conspicua.**

i. Pedes non pilosi.

ii. Pedes pilosi. - 39. *CROCALLIS*, Trist.

**B. Tibiæ anticæ calcaribus dilatatis. - 23. *NEMATOCAMPA*, Guen.**

**B. Alæ posticæ truncatæ.**

**a. Statura gracilis. - 40. *ENTOMOPTERYX*, Guen.**

**b. Statura robusta. - 47. *LYCIMNA*, Walk.**

**B. Tibiæ posticæ non aut vix incrassatæ.**

**A. Alæ non oblongæ.**

**a. Palpi non gracillimi.**

## a. Alæ non tenues.

## i. Alæ non strigatæ.

## \* Antennæ non filiformes.

## † Palpi non rostriformes.

## ‡ Alæ anticæ non dentatæ.

## § Alæ anticæ margine exteriore non flexo.

## → Vertex prominens.

## X Abdomen cristatum.

8. SCARDAMIA, *Guen.*

## XX Abdomen non cristatum.

9. MELINODES, *Herr.-Sch.*

## →→ Vertex non prominens.

## ↪ Frons non valde depressa.

## X Alæ lineatæ.

## 0 Alæ posticæ non dentatæ.

2. PYRINIA, *Hüb.*

## 00 Alæ posticæ dentatæ.

25. METROCAMPA, *Latr.*

## XX Alæ non lineatæ.

## 0 Antennæ non pectinatæ.

## || Alæ anticæ non incisæ.

18. RUMIA, *Dup.*

## ||| Alæ anticæ incisæ.

20. VENILIA, *Dup.*

## 00 Antennæ pectinatæ.

21. ANGERONA, *Dup.*

## ↪ Frons valde depressa.

12. DREPANOGENIS, *Guen.*

## §§ Alæ anticæ margine exteriore flexo.

→ Antennæ pectinatæ. 14. EPIONE, *Dup.*

## →→ Antennæ non pectinatæ.

16. SICYA, *Guen.*

## §§§ Alæ anticæ margine exteriore postico subflexo.

48. FASCELLINA, *Walk.*

## §§§§ Alæ quatuor margine exteriore flexo.

→ Frons porrecta. 22. HYPERETIS, *Guen.*→→ Frons non porrecta. 28. CABERODES, *Guen.*

## ‡ Alæ dentatæ.

## § Fasciculus frontalis non quadratus.

→ Pedes breves. 10. PRIOCYCLA, *Guen.*

## →→ Pedes longi.

## ↪ Pedes graciles.

- × Palpi non gracillimi.
  - 0 Palpi articulo 3o brevissimo.
    - 13. SYNOMOS, *Guen*
  - 00 Palpi articulo 3o lineari.
    - 38. ODONTOPTERA, *Steph*
- ×× Palpi gracillimi.
  - 41. METANEMA, *Guen*
- ~~non~~ Pedes robusti.
  - × Femora non lata.
    - 36. AZELINA, *Guen*
  - ×× Femora lata. 37. SYNEMIA *Guen*
- §§ Fasciculus frontalis quadratus.
  - 43. HIMEBA, *Dr*
- †† Palpi rostriformes.
  - † Palpi non graciles.
    - § Frons non producta. 15. HYPERYTHRA, *Guen*
    - §§ Frons producta.
      - + Corpus gracile. 19. CAUSTOLOMA, *L*
      - + + Corpus robustum. 42. ENNOMOS, *Tre*
  - †† Palpi graciles. - 17. HETEROLOCHA, *L*
- \*\* Antennæ filiformes.
  - † Frons fasciculo porrecto.
    - 3. CRATOPTERA, *Herr.-S*
  - †† Frons fasciculo nullo.
    - † Alæ non falcatæ. - 6. PERICLINA, *Gm*
    - †† Alæ subfalcatæ. - 34. EROSINA, *Gm*
- ii. Alæ strigatæ.
  - \* Palporum articulus 3us brevis. 24. ENDROPIA, *Ga*
  - \*\* Palporum articulus 3us longus. 49. EUPAGIA, *W*
- b. Alæ tenues.
  - i. Palpi gracillimi.
    - \* Frons non linguiformis. - 26. ELLOPIA, *T*
    - \*\* Frons linguiformis. - 27. LEUCULA, *G*
  - ii. Palpi non gracillimi. - 30. ONYCODES, *G*
- B. Alæ oblongæ.
  - a. Alæ non valde dentatæ.
    - a. Alæ anticæ acutæ.
      - i. Alæ anticæ margine exteriori angulato.
        - 31. PRIONIA, *H*
      - ii. Alæ anticæ margine exteriori non angulato.
        - 50. EUTERA, *F*
    - b. Alæ anticæ non acutæ.

i. Alæ anticæ margine exteriori flexo.

32. EURYMENE, Dup.

ii. Alæ anticæ margine exteriori non flexo.

51. CERNINA, Walk.

1. Alæ valde dentatæ.

a. Alæ posticæ margine antico non excavato.

35. SELENIA, Hübn.

b. Alæ posticæ margine antico excavato.

52. ORSONOBA, Walk.

### Genus 1. DREPANODES.

Corpus gracile. Frons angusta, plana, non fasciculata. Proboscis brevis. Palpi breves, ascendentes, applicati; articulus 3us conicus, parvus. Antennæ longiusculæ. Abdomen cylindricum. Tibiæ posticæ plus minusve incrassatæ, sulco fasciculato. Alæ integræ, facia una obliqua; anticæ acutæ, sæpissime falcatæ, linea costam versus sæpe angulato.

Günther, p., Hübn. Verz. Schmett. 150.

Palene, Herr.-Sch.

Drepanodes, Guen. Phal. i. 66.

Body slender. Front narrow, flat, not tufted. Proboscis short. Palpi short, ascending, applied to the head; third joint minute, conical. Antennæ rather long, pubescent or more or less pectinated in the male. Abdomen long, cylindrical, extending as far as the hind wings in the male, generally shorter in the female. Hind wings more or less thickened, with a furrow which contains a tuft of hair. Wings entire, with a single oblique line; fringe short. Fore wings acute, very often falcate; the line often forming an angle near the tip. Hind wings with the exterior border rounded; anterior angle somewhat elongated.

### North America.

#### 1. DREPANODES OLYZONARIA.

Fam. Rufescente-cinerea; tibiæ posticæ vix incrassatæ; alæ nigro subconspersæ, linea nigricante recta distincta intus ochraceo extus albido marginata, puncto discali nigro; anticæ falcatæ, apice nigro conspersæ, linea interiore flexa subobsoleta, margine exteriori vix convexo.

*Female.* Reddish cinereous. Hind tibiæ very slightly thickened. Wings moderately broad, minutely black-speckled; line blackish, straight, distinct, ochraceous-bordered on the inner side, whitish-bordered on the outer side; discal point black, minute; fringe ochraceous. Fore wings falcate, excavated behind the tips, which are more speckled with black than the rest of the wing; interior line bent, almost obsolete except towards the costa; exterior border hardly convex. Length of the body 5? lines; of the wings 14 lines.

a. East Florida. Presented by E. Doubleday, Esq.

### West Indies.

#### A. Alæ nebulosæ.

A. Alæ subtus extus non obscuriores. . . . . epionata, Guen.

#### B. Alæ subtus apud marginem anteriorem obscuriores.

A. Alæ anticæ sat acutæ. - - - - - Tellesaria, Walk.

B. Alæ anticæ obtusæ. - - - - - Pionaria, Walk.

#### B. Alæ non nebulosæ.

A. Alæ supra puncto nullo discali. - - - - - Nutriaria, Walk.

#### B. Alæ puncto discali nigro.

A. Alæ flavæ. - - - - - Paphiaria, Walk.

#### B. Alæ non flavæ.

a. Alæ anticæ fimbria apice nigricante. - Bicesaria, Walk.

b. Alæ anticæ apice fimbria non nigricante.

i. Alæ anticæ valde falcatæ. - - - - - Emearia, Walk.

ii. Alæ anticæ subfalcatæ. - - - - - Nicoaria, Walk.

### 2. DREPANODES EPIONATA.

*Fœm.* *Flavescente-carnea; alæ nigricante strigatæ, flavescente fusco nebulosæ, subtus ochraceæ strigatæ linea nigricante cinereo marginatæ; anticæ valde falcatæ, umbris duabus remotis plumbeo-cinereis, linea subtus recta; posticæ marginis exterioris sat convexo, umbra plumbea vaga, linea subtus arcuata.*

*Drepanodes epionata, Guen. Phal. i. 68, 81.*

Haiti.

## 3. DREPANODES TELLESARIA.

**Fem.** *Straminea; palpi apice nigri; alæ ochraceo nigroque conspersæ, linea nigricante cinerea diffusa incompleta subtus recta bene determinata, spatio exteriori subtus ex parte purpurascens, puncto discali nigro, fimbria ochracea; anticæ valde falcatæ, linea interiori flexa informi incompleta, incisura subapicali; posticæ apud angulum interiorem purpurascens subnebulosæ.*

**Female.** Straw-colour. Palpi with black tips. Wings moderately broad, transversely speckled with ochraceous and with black; line blackish cinereous, diffuse, irregular and incomplete above, especially in the hind wings, straight and well defined beneath, where the exterior space is more thickly speckled with ochraceous, and has in part a purplish tinge; discal point black; fringe ochraceous. Fore wings very falcate, with a bent irregular and incomplete interior line; exterior border convex, excavated behind the tip. Hind wings irregularly purplish-clouded towards the interior angle. Length of the body 5? lines; of the wings 13 lines.

a St. Domingo. From Mr. Tweedie's collection.

## 4. DREPANODES PIONARIA.

**Fem.** *Cinereo-testacea; alæ nigro conspersæ, linea nigricante informi intus ochraceo marginata, linea subtus bene determinata nigricante et purpurascens marginata, puncto discali nigro, fimbria ochracea; anticæ valde falcatæ, apice obtusæ, margine exteriori valde convexo, linea interiori nigricante diffusa flexa, linea media ochracea recta obliqua; posticæ linea exteriori valde diffusa.*

**Female.** Testaceous, cinereous-tinged. Palpi with black tips. Wings sericeous, minutely speckled with black; line blackish, very irregular, bordered with ochraceous on the inner side; fringe ochraceous; discal point black; under side paler, with a well-defined whitish line, whose outer side is concisely bordered with blackish in the fore wings and diffusely bordered with purplish in the hind wings. Fore wings very falcate; tips obtuse; exterior border very convex, excavated behind the tip; interior line blackish, diffuse, bent; middle line ochraceous, straight, oblique, slightly apparent in the hind wings. Hind wings with the exterior line very diffuse; exterior border very convex. Length of the body 5? lines; of the wings 13 lines.

This species and the preceding one are closely allied to *D. Pappiaria*, from which they may be distinguished by their more falcate wings. They are more nearly related to each other, but in *D. Pionaria* the tips of the fore wings are more obtuse and the exterior border is more convex.

a. St. Domingo. From Mr. Tweedie's collection.

### 5. DREPANODES NUTRIARIA.

*Fœm.* *Ochracea, subtus cinerascens; alæ linea recta obscurior extus albido marginata, puncto discali nigro; anticæ falcata, incisura subapicali, margine exteriori convexo.*

*Female.* Ochraceous, paler and with a cinereous tinge beneath. Wings moderately broad; line straight, a little darker than the ground hue, bordered with whitish on the outer side; a black discal point which is only visible on the under side. Fore wings falcate, slightly excavated behind the tips; exterior border convex. Length of the body 5 lines; of the wings 12 lines.

a. St. Domingo. From Mr. Tweedie's collection.

### 6. DREPANODES PAPPIARIA.

*Fœm.* *Straminea; alæ linea lutea indeterminata subtus purpurascens recta distincta intus albido marginata, spatii exteriori subtus ochraceo, puncto discali nigro; anticæ valde falcatae, apice obscuriores, incisura subapicali, linea interiori flexa indistincta, margine exteriori convexo.*

*Female.* Straw-colour. Third joint of the palpi very short. Abdomen extending as far as the hind wings. Wings moderately broad; line luteous and somewhat irregular above, purplish straight distinct and whitish bordered on the inner side beneath; space between the line and the exterior border slightly varied with ochraceous above, wholly ochraceous beneath; a minute black discal point. Fore wings very falcate, excavated behind the tips, which are somewhat darker than the rest of the wings; an indistinct interior bent line, exterior border convex. Length of the body 5 lines; of the wings 12 lines.

a. St. Domingo. From Mr. Tweedie's collection.



## 7. DREPANODES BICESARIA.

**Fem.** *Rufescente-cervina; alæ longiusculæ, nigro subconspersæ, linea indistincta obscuriore subtus cinerea, spatio exteriori subcinerascente, puncto discali nigro cinereo-marginato; antice valde falcate, linea interiore vix conspicua, spatio apud marginem anteriorem vix olivaceo.*

**Female.** Reddish fawn-colour. Wings rather long, minutely and thinly speckled with black; line indistinct, a little darker than the ground hue; space between it and the exterior border slightly cinereous-tinged; fringe ferruginous-red; discal point black, cinereous-bordered, most distinct on the under side, where the line is cinereous. Fore wings very falcate, with a slight trace of an interior line; the exterior line angular towards the tip, the space beyond it with an almost obsolete olive tinge; exterior border much excavated behind the tip. Length of the body  $4\frac{1}{2}$  lines; of the wings 13 lines.

**a. Jamaica.** From Mr. Gosse's collection.

## 8. DREPANODES ŒMEARIA.

**Fem.** *Rufescente-ochracea; abdomen cinereum; alæ fimbria saturatiore apud incisuram nigricante, linea albida recta, puncto discali nigro; antice valde falcate, linea extus cinereo marginata, linea interiore arcuata indistincta; postice linea valde indistincta.*

**Female.** Reddish ochraceous, tinged with cinereous beneath. Abdomen cinereous, not extending as far as the hind wings. Wings moderately broad; fringe of a deeper hue than the rest of the wings, blackish along the subapical excavation of the fore wings; line whitish, straight; under side minutely speckled with black; discal point black, minute, larger beneath. Fore wings very falcate; line partly bordered with cinereous on the outer side, forming an angle towards the tip; interior line curved, indistinct. Hind wings with the line very indistinct. Length of the body  $4\frac{1}{2}$  lines; of the wings 13 lines.

This species can hardly be distinguished from *D. Bicesaria*, except by the less recurved tips of the fore wings.

**a. St. Domingo.** From Mr. Tweedie's collection.

## 9. DREPANODES? NICOARIA.

**Mas.** *Pallide ochracea; caput saturate ochraceum; antennæ pectinatae; abdomen lateribus subfasciculatis, fasciculo apicali sub magno; tibiæ posticæ incrassatae; alæ purpurascente tinctæ, fasciis duabus deviis ochraceis, 1a albido extus marginata, 2a marginali; anticæ subfalcatae, fascia 1a antice subobsoleta, 2a interrupta valde informi, linea subtus tenui recta albida extus purpurascente marginata.*

**Male.** Pale ochraceous. Head deep ochraceous. Antennæ pectinated, except towards the tips. Body partly whitish. Abdomen slightly tufted along each side, and with a rather large apical tuft. Hind tibiæ thickened. Wings with a pale purplish tinge; two irregular ochraceous bands, the first bordered with whitish on the outer side; the second marginal; black discal point very small. Fore wings subfalcate; first band dilated in front, but only indicated there by its borders; second band interrupted, very irregular; under side with a single slender straight whitish line, which is bordered with purplish on the outer side. Hind wings beneath of a deeper hue towards the exterior border, with no line. Length of the body 5 lines; of the wings 12 lines.

**a.** St. Domingo. From Mr. Tweedie's collection.

## South America.

**A.** Alæ anticæ maculis posticis nullis albis.

**A.** Alæ anticæ costa non nigra.

**a.** Alæ anticæ puncto discali albo. - ephyrata, Guér.

**b.** Alæ anticæ puncto discali non albo.

**a.** Alæ anticæ plaga postica. - - infensata, Guér.

**b.** Alæ anticæ bimaculatæ. - - inunculata, Guér.

**c.** Alæ non maculatæ.

**i.** Alæ flavæ.

\* Alæ linea rufescente aut ochracea.

† Alæ linea latissime marginata - pholata, Guér.

†† Alæ linea non latissime marginata.

Byblusaria, Walk.

\*\* Alæ anticæ linea alba. - - spiculata, Guér.

**ii.** Alæ non flavæ.

\* Alæ posticæ costa incisa. - procurvaria, Guér.

\*\* Alæ posticæ costa non incisa.

- † Alæ anticæ non falcatæ.
- ‡ Alæ linea nigro-fusca. - insudata, *Guen.*
- ‡ Alæ linea violaceo-alba. - abrasata, *Guen.*
- †† Alæ anticæ vix falcatæ.
- ‡ Alæ linea subtus conspicua.
- § Alæ anticæ apice nigro conspersæ.
- hamulata, *Guen.*
- §§ Alæ anticæ apice non conspersæ.
- impensata, *Walk.*
- ‡ Alæ linea subtus obsoleta. harpagulata, *Guen.*
- †† Alæ anticæ subfalcatæ. - falcularia, *Herr.-Sch.*
- ‡ Alæ anticæ plaga alba.
- ‡ Alæ anticæ plaga nulla alba. sublustraria, *Walk.*
- ††† Alæ anticæ falcatæ.
- ‡ Alæ linea distincta.
- § Alæ linea vix marginata. - siculata, *Guen.*
- §§ Alæ linea late marginata - moxaria, *Guen.*
- ‡ Alæ linea vix distincta. - meticulata, *Guen.*
- †††† Alæ anticæ valde falcatæ.
- ‡ Alæ linea albo non punctata.
- § Alæ nebulosæ. - drepanula, *Hübner.*
- §§ Alæ non nebulosæ.
- + Alæ purpurascentes impurpurata, *Walk.*
- + + Alæ non purpurascentes. falcularia, *Anon.*
- ‡ Alæ linea albo punctata. - Agronaria, *Walk.*
- B. Alæ anticæ costa nigra. - - - Lucata, *Stoll.*
- E. Alæ anticæ maculis posticis albis. - maculata, *Stoll.*

## 10. DREPANODES HAMULATA.

*Max.* Pallide rufescente-cervina; alæ subpurpurascente suffusæ, subtus strigatæ, linea recta fusca violaceo-albo marginata, puncto discali nigro; anticæ apice nigro conspersæ, vix falcate; posticæ linea media e atomis ferrugineis.

*Drepanodes hamulata*, *Guen. Phal. i. 67, 77.*

*Basil.*

## 11. DREPANODES HARPAGULATA.

*Max.* D. hamulatæ simillima; alæ linea rufa subtus obsoleta; anticæ apud marginem anteriorem velutinæ, nitentes.

*Drepanodes harpagulata*, *Guen. Phal. i. 67, 78.*

*Ceylan.*

## 12. DREPANODES SICULATA.

Fœm. *D. hamulatæ affinis ; alæ pallidiores, magis incarnatæ ; linea nigricante, non aut vix marginata, puncto nigro subtus bene determinato ; anticæ apice falcatæ, nigro tinctæ, lineæ angulo acutiore.*

*Drepanodes siculata, Guen. Phal. i. 67, 79.*

Cayenne.

## 13. DREPANODES METICULATA.

Fœm. *D. siculatæ simillima ; alæ argillaceo-incarnatæ, lineæ distincta ; anticæ apice concolores, falcatæ, minus elongatæ ; posticæ subtrigonæ, angulo interiore acuto, subtus violaceo-albo, margine argillaceo non velutino.*

*Drepanodes meticulata, Guen. Phal. i. 68, 80.*

Venezuela.

## 14. DREPANODES INFENSATA.

Mas. *Flavescente-carnea ; alæ cinereo strigatæ, linea tenui recta fusca, plagis exterioribus et atomis violaceo-cinereis, puncto discali nigro ; anticæ plaga apud angulum interiorem magni punctum cinereo-nigrum includente, umbra interiore cinerea biangulata ; posticæ plaga vaga insulata.*

*Drepanodes infensata, Guen. Phal. i. 68, 82.*

Brazil.

## 15. DREPANODES EPHYRATA.

Mas. *Cervino-rufescens ; alæ carneo suffusæ, linea violaceo-albo ferrugineo marginata, fimbria ferruginea apice alba ; antia lineæ angulo valde aperto, puncto discali albo nigricante marginato, umbra exteriori magna nigricante.*

*Drepanodes ephyrata, Guen. Phal. i. 69, 83.*

Guadeloupe.

## 16. DREPANODES INSUDATA.

Mas. *Pallide flavescente-carnea ; tibiæ posticæ nigro pilosæ ; alæ fusco strigatæ, linea recta nigro-fusca optime determinata, puncto discali nigro ; anticæ acutæ, non falcatæ, linea subtus non angulata ; posticæ linea subtus nulla.*

*Drepanodes insudata, Guen. Phal. i. 69, 84.*

Brazil.

## 17. DREPANODES INUNCULATA.

**MAJ.** *D. hamulatæ similis*; alæ linea violaceo-alba fusco marginata; anticæ linea subarcuata, maculis duabus rotundatis exterioribus flavescendo-albis, linea subtus subobsoleta.

*Drepanodes inunculata*, Guen. *Phal.* i. 69, 85.

Brazû?

## 18. DREPANODES FALCULARIA.

(*Nomen bis lectum*).

**FÆM.** *Rufescente-cervina*; alæ nigricante strigatæ, linea recta nigricante, puncto discali nigro; anticæ subfalcatæ, linea apicem versus obsoleta non angulata, umbra interiore nigricante, plaga apud angulum interiorem alba nigro marginata; posticæ linea exteriori diffusa albida.

*Patalene falcularia*, Herr.-Sch. *Lep. Exot.* f. 199.

*Drepanodes falcularia*, Guen. *Phal.* i. 69, 86.

Surinam.

## 19. DREPANODES ABRASATA.

**MAJ.** *Cerrino-rufescens*; alæ carneo suffusæ, linea violaceo-alba intus ferrugineo nebulosa, nebulis exterioribus angulosis violaceo-albis; anticæ valde acutæ, non falcatæ; anticæ linea nebulosa furcata; posticæ margine exteriori obscuriore.

*Drepanodes abrasata*, Guen. *Phal.* i. 70, 87.

Amazon Region.

## 20. DREPANODES PHOLATA.

**FÆM.** *Pallide flavescens*; alæ linea rufescente recta extus ferrugineo latissime marginata; anticæ falcatæ, apices versus ferrugineo nebulosæ, gutta costali subapicali alba, linea antice albo punctata.

*Drepanodes pholata*, Guen. *Phal.* i. 70, 88, pl. 16, f. 2.

Brazil.

## 21. DREPANODES SPICULATA.

Fœm. *Pallide flava; alæ sericeæ, linea alba recta nigricant umbrata, spatioso interiore subolivaceo, spatio exteriori roseo-carneo, margine exteriori flavo; anticæ apice valde productæ vix recurvæ ferrugineo tinctæ, lineæ angulo brevi, gutta costali subapicali punctisque duobus basalibus albis.*

*Drepanodes spiculata*, Guen. *Phal.* i. 70, 89.

Brazil.

## 22. DREPANODES MOXARIA.

Mas. *Ochracea; alæ linea recta rufescente cinerascens extus late marginata; anticæ apice falcata obtusæ, spatio antico ferrugineo apud costam olivaceo, punctis duobus costalibus subapicalibus albis, umbris duabus ferrugineis subcostalibus; postica linea abbreviata, punctis nonnullis submarginalibus.*

*Drepanodes moxaria*, Guen. *Phal.* i. 71, 90, pl. 17, f. 4.

Brazil.

## 23. DREPANODES DREPANULA.

Fœm. *Pallide fulrescens; alæ fusco strigatæ et nebulosæ, subtus ochraceæ, linea rufescente extus schistaceo marginata, fimbria rufescente; anticæ valde falcata, linea interiore flexa; postica schistaceo marginata.*

*Syssaura Drepanula*, Hübn. *Zutr.* 13, 124, f. 247, 248; *Verz. Schin.* 150, 1576.

*Drepanodes Drepanularia*, Guen. *Phal.* i. 71, 91.

Surinam.

## 24. DREPANODES PROCURVARIA.

Fœm. *Fulrescente-fusca, subtilis late ochraceo-flava; alæ linea recta fimbriaque obscurioribus; anticæ apice spatulatæ recurvæ, incisura magna subapicali, linea interiore angulata; postica apud costam lutescentes, costa late incisa.*

*Drepanodes procurvaria*, Guen. *Phal.* i. 71, 92, pl. 7, f. 1.

Brazil.

## 25. DREPANODES FALCULARIA.

*Rufa-ferruginea; alæ linea albida recta; anticæ valde falcatae, linea costam versus angulata, fasciis duabus interioribus nigris postice abbreviatis, spatio exteriori pallidiore, umbra exteriori postica cinerea.*

*Phalena-Geometra falcularia, Anon. Ins. Surin. 147, pl. 70.*

*Surinam.*

## 26. DREPANODES BYBLUSARIA.

*Mas. Pallide flava; antennæ pectinatae; tibiæ posticæ valde dilatatae; alæ latæ, ochraceo conspersæ, linea ochracea recta distincta, linea subtus nigra incompleta rufescente marginata; anticæ valde falcatae, apice rufescentes, lituris duabus subcostalibus diffusis rufescentibus linea antice albo punctata.*

*Male. Pale yellow. Antennæ moderately pectinated. Abdomen hardly extending as far as the hind wings. Hind tibiæ much dilated. Wings broad, minutely ochraceous-speckled; line ochraceous, straight, distinct; fringe ochraceous; under side with a black incomplete line, which is diffusedly bordered with reddish, is dilated in the hind wings, and does not correspond to the line above. Fore wings very falcate, excavated behind the tips, which are reddish; two diffuse reddish subcostal marks, indicating two lines, which are elsewhere obsolete; some white points on the fore part of the line, which has an angle very near the costa. Length of the body 6 lines; of the wings 15 lines.*

*♂ Brazil. Presented by H. Low, Esq.*

## 27. DREPANODES AGRONARIA.

*Mas. Fuscescens; palpi apice nigri; antennæ pectinatae; alæ ferrugineæ, longiusculæ, subtus flavæ, linea flava indistincta subrecta albo punctata, linea subtus nigra incompleta; anticæ valde falcatae, apice rotundatae, costa valde convexa, incisura subapicali, margine exteriori subconvexo; posticæ fascia exteriori diffusa nigricante.*

*Male. Brownish; under side and abdomen towards the tip pale cinereous. Antennæ moderately pectinated. Palpi with black tips. Abdomen extending as far as the hind wings. Wings ferruginous, rather long, yellow beneath; line yellow, almost straight,*

not distinct; under side with a straight incomplete black line, which is dilated on the hind wings, and does not correspond to the line above. Fore wings very falcate; tips rounded; costa very convex; exterior border slightly convex, much excavated behind the tip; line accompanied by white points, forming an angle very near the costa. Hind wings with more minute white points on the hind margin along whose outer side there is a slight diffuse blackish band. Length of the body  $5\frac{1}{2}$  lines; of the wings 16 lines.

Rio Janeiro. In Mr. Fry's collection.

## 28. DREPANODES IMPURPURATA.

*Fœm.* *Albido-purpurea*; *caput supra cervinum*; *alæ pallidæ purpureæ, breviusculæ, nigro subconspersæ, linea ochracea recta extus albida, puncto discali nigro, fimbria ochracea, plaga subcostali ochracea, linea costam versus angulata reflexa, costa subconvexa.*

*Female.* Whitish purple, whitish beneath. Head fawn-colored above. Palpi rising a little higher than the front and thus longer than in the typical species of the genus. Wings pale purple, rather short, minutely speckled with black; line ochraceous, straight, whitish on the outer side; discal point black; fringe ochraceous. Fore wings falcate, with an ochraceous patch adjoining the inner side of the line near the costa, which is slightly convex; line reflex and forming an angle near the costa. Length of the body 5 lines; of the wings 14 lines.

*a.* Venezuela. From Mr. Dyson's collection.

## 29. DREPANODES IMPENSATA.

*Mas.* *Ochracea, sat gracilis*; *caput supra album*; *alæ breviusculæ, latiusculæ, nigro subconspersæ, linea ochracea recta extus albido marginata, spatio exterioriore pallidiore subpurpurascens, puncto discali nigro*; *antica subfalcata, lineis duabus indistinctis, ochraceis undulatis diffusis subobliquis, costa vix convexa.*

*Male.* Dull ochraceous, rather slender, whitish cinereous beneath. Palpi obliquely ascending, slightly curved, shorter than in the preceding species. Head white above between the antennæ. Wings rather short and broad; line very distinct, ochraceous, straight



whitish-bordered on the outer side ; the whole space beyond it paler and lilac-tinged ; black speckles very minute, more prevalent on the under side ; discal point black. Fore wings slightly falcate, with the line forming an angle towards the tip ; two more interior indistinct ochraceous undulating diffuse slightly oblique lines ; costa hardly convex ; exterior border straight. Length of the body 6 lines ; of the wings 14 lines.

Rio Janeiro.

a. Venezuela. From Mr. Dyson's collection.

b. ——— ?

### 30. DREPANODES SUBLUSTRARIA.

*Fem.* Olivacea, subtus late flava rufo conspersa ; alæ linea exteriore recta albida obliqua subrecta, spatio submarginali glaucescente nitente, fascia subtus submarginali rufa ; antica subfalcata, fascia interiore undulata rufescente, costa valde convexa, linea subtus submarginali nivea antice dilatata ; postica linea interiore rufa.

*Female.* Olive-colour, bright yellow and thickly speckled with minute red transverse marks beneath. Wings transversely speckled with red, with a whitish almost straight exterior line, which extends from two-thirds of the length of the interior border of the hind wings to beyond five-sixths of the length of the costa of the fore wings ; submarginal space with a shining glaucous tinge ; under side with a submarginal red band. Fore wings subfalcate, with a dull red undulating interior band ; costa very convex ; under side with a shining white submarginal line, which is dilated towards the costa. Hind wings beneath with an interior red line, which is parallel to the submarginal band. Length of the body  $4\frac{1}{2}$  lines ; of the wings 12 lines.

a. Pará. From Mr. Bates' collection.

### 31. DREPANODES ? LUCIATA.

*Cinereus* ; alæ longiusculæ, fusco strigatæ, linea recta lutescente ; antica falcata, costam versus sublutescentes, costa convexa nigra, striga fusca subcostali brevi obliqua ; postica linea exteriore fusca.

*Phalena-Geometra Luciata*, Stoll. *Cram. Pap. Exot.* v. 56, pl. 12, f. 5.

Surinam.

## 32. DREPANODES? MACULATA.

*Ferruginea ; alæ longiusculæ, substrigatæ ; anticæ falcatæ, costæ convexa, maculis duabus apud angulum interiorent albis.*

*Phalæna-Geometra maculata, Stoll. Cram. Pap. Exot. v. 56, pl. 12, f. 6.*

Surinam.

Country unknown.

## 33. DREPANODES? PHYLLOSARIA.

*Mas. Lutea ; palpi apice fuscis ; alæ fascia lata marginali punctoque discali cervinis, linea nulla, fascia subtilis rufescent-ferruginea nigro notata, puncto subtilis magno nigricante-fusco ; anticæ subfalcatæ, incisura subapicali vix ulla, lituris costalibus nigricante-fuscis ; posticæ subtilis macula costali parva nigricante-fusca.*

*Male.* Luteous. Palpi brown towards the tips. Abdomen not extending so far as the hind wings. Wings with no lines, but with a broad marginal fawn-coloured band ; discal point fawn-colour ; under side thinly and transversely streaked with brown, with a reddish ferruginous black-marked band ; discal point large, blackish brown. Fore wings slightly falcate, hardly excavated behind the tips, with irregular blackish brown marks along the costa ; band on the under side enclosing a large yellow apical spot. Hind wings beneath with a small blackish brown costal spot ; the band not extending to the exterior border. Length of the body 5 lines ; of the wings 15 lines.

*a.* ——— ? Presented by E. Doubleday, Esq.

## Genus 2. PYRINIA.

Corpus vix robustum. Proboscis brevis. Palpi contigui, porrecti, caput paullo superantes ; articulus 3us conicus, minimus. Antennæ longæ, maris pubescentes. Abdomen maris carinatum, fasciculo apicali quadrato. Tibiæ posticæ vix incrassatæ, nonnunquam valde incrassatæ. Alæ robustæ, integræ, flavescente aut ochraceæ, sæpissime conspersæ, linea obliqua ; anticæ non falcatæ ; posticæ breves, rotundatæ.

*Pyrinia, Hübn. Verz. Schm. 294.*

*Crocopteryx, Guen. Phal. i. 72.*

Body moderately stout. Proboscis short. Palpi approximate, perfect, extending a little beyond the head; third joint conical, very minute. Antennæ long, pubescent in the male. Abdomen beel in the male, and terminated by a quadrate tuft of hairs, generally extending as far as the hind wings. Hind tibiæ hardly incrassated, much incrassated in some species. Wings stout, entire, yellow or ochraceous, generally speckled, with a discal point, and with an oblique line. Fore wings not falcate. Hind wings short, rounded; interior angle prominent.

Guenée gives as a character of this genus that the tibiæ are not a but slightly swollen nor furrowed, but in some species they are very thick.

### South America.

#### A. Alæ non trilineatæ.

##### A. Alæ anticæ linea interiore obliqua aut nulla.

##### a. Alæ posticæ margine exteriori non flexo.

##### a. Alæ linea argenteo non marginata.

##### i. Alæ violaceo tinctæ.

\* Alæ linea nigricante. - - transitata, *Guen.*

\*\* Alæ linea non nigricante. - - optivata, *Guen.*

##### ii. Alæ violaceo non tinctæ.

\* Caput rufescens.

† Alæ anticæ subtus albo non maculatæ.

erythrocephalata, *Guen.*

†† Alæ subtus albo maculatæ. - Briasaria, *Walk.*

\*\* Caput non rufescens.

† Alæ nigro strigatæ.

‡ Alæ non bilineatæ. - - rutilaria, *Hübner.*

†† Alæ bilineatæ. - helvaria, *Herr.-Sch.*

†† Alæ ferrugineo strigatæ.

‡ Alæ posticæ non maculatæ.

§ Alæ fimbria apice nigra. - resignata, *Guen.*

§§ Alæ fimbria apice non nigra.

+ Alæ posticæ macula nulla apicali.

∞ Alæ anticæ margine exteriori rotundato.

Phœbeata, *Guen.*

∞ Alæ anticæ margine exteriori recto.

Carthamata, *Guen.*

→→ Alæ posticæ macula apicali.

∞ Alæ luteæ. - cœrocampa, *Guen.*

∞ Alæ fulvæ. - - sterrhata, *Guen.*

- ‡ Alæ posticæ maculatæ. - - pervisata, Guen.  
 b. Alæ linea argenteo aut plumbeo marginata.  
   i. Alæ fasciatæ. - - - solata, Guen.  
   ii. Alæ non fasciatæ. - - - Cœaria, Walk.  
 B. Alæ posticæ margine exteriori flexo. - copiosata, Guen.  
 B. Alæ anticæ linea interiori erecta. - Lebonaria, Walk.  
 B. Alæ trilineatæ. - - - Itunaria, Walk.

### 1. PYRINIA TRANSITATA.

**Mas.** *Saturate olivaceo-rufescens; alæ linea recta nigricante, extus ochraceo-flavæ, violaceo-albo tinctæ, margine olivaceo, subtus læte flavæ strigis ferrugineis ex parte confluentibus; anticæ apice productæ, costa flavæ; posticæ spatio exteriori consperso.*

*Crocopteryx transitata, Guen. Phal. i. 72, 93.*

Brazil?

### 2. PYRINIA OPTIVATA.

**Fœm.** *Ferrugineo-rufa; alæ linea fere concolori, nebula contigua interiori violacea, subtus læte ochraceo-flavæ lateritio strigata; anticæ linea violacea submarginali; posticæ lineis duabus parallelis rufescentibus, 1a antice duplicata.*

*Crocopteryx optivata, Guen. Phal. i. 72, 94.*

Brazil.

### 3. PYRINIA ERYTHROCEPHALATA.

**Mas.** *Pallide flavæ; caput ferrugineo-rufum; antennæ pectinatæ; alæ ferrugineo strigatæ, linea recta obliqua ferrugineo-rufa; anticæ valde acutæ, nebula submarginali maculaque postica ferrugineo-rufis, margine exteriori subconcavo; posticæ sublineis duabus ferrugineo-rufis.*

*Crocopteryx erythrocephalata, Guen. Phal. i. 73, 95.*

Brazil.

### 4. PYRINIA PERVISATA.

**Mas.** *Sordide ochraceo-flavæ; alæ ferrugineo conspersæ; anticæ valde acutæ, strigis duabus costalibus obliquis rufo-ferrugineis punctis tribus nigris apud angulum interiorem; posticæ maculæ*

*duabus rufo-fuscis apud angulum anteriorem et apud costam, linea subtus submarginali.*

*Crocopteryx pervisata*, Guen. *Phal.* i. 73, 96.

Ceylon.

#### 5. PYRINIA RESIGNATA.

*Fem.* *Ochraceo-flava; alæ ferrugineo strigatæ; anticæ lineis duabus incompletis interruptis fimbriaque ferrugineis, hac apice nigra, litura costali subapicali ferruginea albo lineata nigro terminata, maculis duabus nigris atomisque intermediis albis apud angulum anteriorem; postica linea una.*

*Crocopteryx resignata*, Guen. *Phal.* i. 73, 97.

Basil.

#### 6. PYRINIA PHŒBEATA.

*Fem.* *Croceo-flava; alæ ferrugineo strigatæ; anticæ lineis duabus macularibus e strigis, macula costali subapicali alba sericea ferrugineo marginata, margine anteriore rotundato, posticæ umbra submarginali e strigis.*

*Crocopteryx Phœbeata*, Guen. *Phal.* i. 74, 98.

Basil.

#### 7. PYRINIA CARTHAMATA.

*Fem.* *C. Phœbeatæ simillima, minor, colore latiore, lituris magis determinatis, strigis plurimis; anticæ spatio anteriore ferrugineo, margine anteriore recto.*

*Crocopteryx Carthamata*, Guen. *Phal.* i. 74, 99.

Basil.

#### 8. PYRINIA CEROCAMPATA.

*Var.?* *Lute crocea; caput et thorax anticus ochracea; alæ fusco substrigatæ, fascia rufa recta obliqua; anticæ lituris costalibus nigris, litura apicali albida nonnunquam obsoleta, maculis tribus rufis; posticæ macula apicali rufa.*

*Crocopteryx cerocampata*, Guen. *Phal.* i. 75, 101.

Ceylon.

*Var. ? Male.* Bright gamboge-yellow. Head and fore part of the thorax ochraceous. Hind tibiæ thickened. Wings thinly and minutely streaked with brown; a red straight oblique band; under side with the red marks much more prevalent. Fore wings with black marks along the costa, and with an occasionally obsolete whitish mark in the dilated part of the band at the tip; a red spot in the disk, another hindward and nearer the base, and a third at the interior angle. Hind wings with a red apical spot. Length of the body 4 lines; of the wings 10 lines.

a, b. Parà. From Mr. Bates' collection.

c. Ega. From Mr. Bates' collection.

#### 9. PYRINIA HELVARIA.

*Lutea; alæ nigro strigatæ; anticæ maculis duabus discalibus fasciæque marginali antice attenuata apicem non attingent nigricantibus, litura costali subapicali nigricante albis notata; posticæ fascia maculari nigricante.*

(Geometra) helvaria, *Herr.-Sch. Lep. Exot.* f. 201.

Crocopteryx helvaria, *Guen. Phal.* i. 75, 102.

Surinam.

#### 10. PYRINIA STERRHATA.

*Mas. Læte fulva; alæ strigis nonnullis, fascia recta fimbriæque lateritio rufis; anticæ fascia apud costam subdilata, lineâ interiore et maculis tribus rufis, fascia subtus violaceo-cinerecente tincta.*

Crocopteryx sterrhata, *Guen. Phal.* i. 75, 103.

Brazil.

The specimens described as a variety of *C. cerocampata* belong to this species, as their characters agree equally well with Guenée's description of the latter.

#### 11. PYRINIA SOLATA.

*Mas. Croceo-flava; caput saturate ferrugineo-fuscum; alæ rufæ suffusæ et strigatæ, fascia læte rufa intus plumbeo marginatâ; anticæ fascia subarcuata, tinctura exteriori nitente violaceâ*

*alba, disco pallidiorē maculam vagam ferrugineam includente, margine exteriorē recto.*

*Crocopteryx solata*, Guen. *Phal.* i. 75, 104.

Brazil.

## 12. PYRINIA RUTILARIA.

*Ochracea; alæ nigro strigatæ, lineis duabus subarcuatis subparallelis rufis, linea exteriorē subtus obsoleta.*

*Pyrinia rutilaria*, Hübn. *Zutr.* 29, 87, f. 173, 174; *Verz. Schm.* 294, 2854.

*Crocopteryx rutilaria*, Guen. *Phal.* i. 76, 105.

Saribam.

## 13. PYRINIA COPIOSATA.

*Mas et fœm. Ruso-fulva; alæ strigatæ, lineis duabus lateritiorufis; antice linea interiorē arcuata, linea exteriorē obliqua recta, margine recto; posticæ lineis duabus rectis, margine exteriorē flexo.*

*Crocopteryx copiosata*, Guen. *Phal.* i. 76, 106.

Brazil.

## 14. PYRINIA LEBONARIA.

*Mas. Latè ochracea, subtus pallide flava; palpi fuscescentes; antennæ validæ, simplices; alæ latiusculæ, linea recta obliqua fusca cinereo extus late marginata, lineis subtus nullis; antice acuta, linea interiorē subrecta non obliqua, linea exteriorē albo punctata, costa convexa cinereo-fusca, puncto discali nigro, margine exteriorē subconvexo; posticæ margine exteriorē subflexo.*

*Male.* Bright ochraceous, pale yellow beneath. Palpi brownish. Antennæ stout, simple. Wings rather broad, with a straight oblique brown line, which is diffusedly bordered with cinereous on the outer side; under side without lines. Fore wings acute, with an interior nearly straight and upright brownish line; exterior line with white points, not extending to the costa, which is convex and cinereous-brown; a minute black discal point; exterior border slightly convex. Hind wings with the exterior border slightly bent. Length of the body 5 lines; of the wings 16 lines.

*a. Venezuela.* From Mr. Dyson's collection.

## 15. PYRINIA CÆARIA.

**Mas.** *Late rufescente-ochracea; antennæ subciliatæ; caput saturate rufum; tibiæ posticæ valde incrassatæ; alæ stripi transversis saturate rufis, linea obliqua rufa extus albo nitent diffuse marginata, subtus late luteæ strigis fasciæque submarginali rufis; anticæ vix acutæ, linea antice subundulata, macula costali subapicali albo notata maculisque duabus discalibus rufis; posticæ linea subrecta.*

**Male.** Bright reddish ochraceous. Antennæ minutely ciliated. Head deep red. Hind tibiæ much incrassated. Wings with deep red transverse streaks; a deep red oblique line, which is diffusely bordered with shining white on the outer side; under side bright luteous with much larger red streaks, which are confluent exteriorly and form a submarginal band. Fore wings hardly acute; the line slightly undulating in front, ending in a red white-marked costal subapical spot, a red discal dot with another one behind it and a little nearer to the base. Hind wings with the line almost straight. Length of the body 6 lines; of the wings 13 lines.

**a. Parâ.** From Mr. Bates' collection.

## 16. PYRINIA? ITUNARIA.

**Mas.** *Ferrugineo-rufa; antennæ ciliatæ; abdomen alas posticas paullo superans; tibiæ posticæ incrassatæ; alæ breviusculæ, lineis tribus obliquis subrectis subparallelis ferrugineis, linea 1a diffusa, 2a 3aque concisis, subtus late flavæ rufo ex parte suffusæ; anticæ vix acutæ, macula subcostali subapicali albâ, linea subtus nigra abbreviata fusco late marginata; posticæ subtus linea integra rufo late marginata.*

**Male.** Ferruginous-red. Antennæ ciliated. Abdomen extending a little beyond the hind wings. Hind tibiæ thickened. Wings rather short, with three oblique nearly straight almost parallel ferruginous lines; first line diffuse; second and third lines concise; under side bright yellow, partly suffused with red; a cinereous tinge along the hind part of the exterior border. Fore wings hardly acute, with a white subcostal and subapical spot; under side with a black exterior line which is broadly bordered with brown on the outer side and is obsolete in front. Hind wings beneath with an entire line which is broadly bordered with red. Length of the body 4 lines; of the wings 8 lines.

**a. Ega.** From Mr. Bates' collection.



## 17. PYRINIA BRIASARIA.

**Mas.** *Late flava; caput supra ferrugineo-rufum; antennæ subciliatæ; pedes rufo valde conspersæ, tibiis posticis incrassatis; alæ lituris parvis transversis rufis, linea recta obliqua rufescente-cervina, colore subtus lætiore magis repanda, fascia subtus albo notata; antica acutæ, rufo guttatæ, costa fusco conspersa, macula costali nivea; postica fascia marginali rufescente indeterminata.*

**Male.** Bright yellow. Head mostly, palpi above and at the tips and fore border of the thorax bright ferruginous-red. Antennæ minutely ciliated. Legs much speckled with red; hind tibiæ much incrassated. Wings minutely and transversely marked with red; a straight oblique reddish fawn-coloured band extending from the tips of the fore wings to the middle of the exterior border of the hind wings; under side with the red hue brighter and more prevalent, the band also dilated, and containing some shining white marks. Fore wings acute, with a few red dots; costa thickly marked with brown; band bright ferruginous-red by the costa, where it joins a shining white spot; exterior border straight. Hind wings with a faint reddish submarginal band. Length of the body 5 lines; of the wings 12 lines.

**Par.** From Mr. Bates' collection.

## Asia.

## 18. PYRINIA MARTIATA.

**Mas.** *Late lutea; caput et thorax anticus ochracea; antennæ pubescentes; tibiæ posticae subincrassatæ; alæ fascia perobliqua rufa, strigis rufescentibus, fasciis duabus subtus incompletis; antica acutæ, costa margine exteriori fimbriaque nigro notatis, lituris duabus costalibus albidis rufescente marginatis.*

**Cacopteryx Martiata, Guen. Phal. i. 74, pl. 5, f. 8.**

**Male.** Bright luteous-yellow. Head and fore part of the thorax bright ochraceous. Antennæ pubescent. Abdomen extending as far as the hind wings. Hind tibiæ slightly thickened. Wings with a red very oblique band, and with reddish streaks, which are much more numerous on the under side, and are there partly confluent and form two incomplete bands. Fore wings acute; costa,

exterior border and fringe marked with black; two whitish costal reddish-bordered marks. Length of the body 4 lines; of the wings 11 lines.

Hindustan?

Sarawak, Borneo.

a. Java. From the East India Company's collection.

### Country unknown.

#### 19. PYRINIA PRUSIASARIA.

*Mas. Lutea, rufo conspersa; caput supra rufum; alæ fascia recta obliqua intus diffusa; anticæ vix acutæ, antice usque ad lineam flavæ, maculis duabus discalibus rufescentibus, fasci subtus valde dilatata.*

*Male.* Luteous, speckled with red, like *P. Martiata* in structure. Head above and palpi towards the tips red. Wings with a straight red oblique band, which is somewhat diffuse on the inner side, and extends from beyond half the length of the interior border of the hind wings to near the tip of the costa of the fore wings. Fore wings hardly acute, yellow from the base to the band, with two reddish discal spots, the hind one nearer the base than the fore one; under side with the band much dilated on the outer side. Length of the body 4 lines; of the wings 11 lines.

a. ———?

### Genus 3. CRATOPTERA.

Corpus sat robustum. Frons fasciculo conico porrecto. Palpi compressi, porrecti aut vix ascendentes, caput superantes; articulus 3us cylindricus, 2i dimidio non brevior. Antennæ cylindricæ, simplices. Pedes vix robusti; tibiæ posticæ longæ, non incrassatæ, calcaribus longis. Alæ amplæ, concolores, non angulatæ, linea unica obliqua; anticæ acutæ, subapices vix excavatæ; posticæ trigonæ, angulo interiore producto.

Cratoptera, *Herr.-Sch. Lep. Exot.*; *Guen. Phal.* i. 76.

Body moderately stout. Front with a conical porrect tuft. Palpi compressed, porrect or hardly ascending, extending some distance beyond the head; third joint cylindrical, much more slender than the second, and about half its length. Antennæ cylindrical and bare in both sexes. Abdomen of the male slightly thickened at

the tip, abruptly tufted. Legs hardly stout; hind tibiæ long, not incrassated; spurs long, slender. Wings ample, not angular, alike in colour, with a single oblique line. Fore wings acute, very slightly excavated behind the tips. Hind wings triangular; interior angle prolonged.

A. Alæ anticæ costa non cervina.

A. Alæ linea submarginali punctulari.      *vestianaria*, Herr.-Sch.

a. Alæ linea nulla submarginali.      -      *vilaria*, Herr.-Sch.

B. Alæ anticæ costa cervina.

A. Alæ maculis submarginalibus.      -      -      *porimata*, Guen.

B. Alæ maculis nullis submarginalibus.      -      *Celtillusaria*, Walk.

### 1. CRATOPTERA VESTIANARIA.

*Lata crocea; alæ linea recta obliqua ferruginea extus flavo marginata, linea exterior e punctis ferrugineis albo notatis; anticæ subquadratae; posticæ margine exterior vix flexo.*

*Cratoptera vestianaria*, Herr.-Sch. *Lep. Exot.* f. 311. Guen. *Phal.* i. 77, 107.

Brazil. Pará.

### 2. CRATOPTERA VILARIA.

*Straminea; alæ linea recta obliqua ochracea extus albido marginata; anticæ subquadratae, vix falcatae; posticæ margine exterior vix flexo.*

*Cratoptera vilaria*, Herr.-Sch. *Lep. Exot.* f. 336. Guen. *Phal.* i. 77, 108.

Rio Janeiro.

### 3. CRATOPTERA PORIMATA.

*Flava, subtus lutea; caput antice ferrugineam; alæ nigro subconspersæ, linea obliqua recta cervina, fascia exterior valde incompleta e maculis oblongis cinereo notatis; anticæ costa cervina albido notata.*

*Cratoptera porimata*, Guen. *Phal.* i. 77, 109.

Colombia?

a. Iapaya. From Mr. Bates' collection.

## 4. CRATOPTERA CELTILLUSARIA.

**Fœm.** *Flava*; caput antice ferrugineum; palporum articulus 3us brevissimus; antennæ sat robustæ; alæ nigro subconspersæ, linea recta obliqua pallide ochracea, fimbria saturate ochracea; anticæ apice subproductæ, subtus luteæ linea nigricante fasciæque rufescente ornata, costa subconvexa cervina albido notata fusco unimaculata; posticæ subtus ochraceæ.

**Female.** Yellow, much brighter beneath. Head in front and palpi towards their tips ferruginous; third joint of the latter less than one-fourth of the length of the second. Antennæ rather stout, quite bare. Wings ample, thinly and minutely speckled with black; a pale ochraceous straight oblique line; fringe deeper ochraceous. Fore wings with the tips somewhat prolonged; costa slightly convex, fawn-coloured, whitish-marked, with a brown spot beyond three-fourths of the length; under side luteous, largely-speckled; line blackish, traversing a reddish band. Hind wings ochraceous beneath, with the line and the band almost obsolete. Length of the body 6 lines; of the wings 18 lines.

*a.* Nanta, Amazon Region. From M. Degand's collection.

## Genus 4. GYNOPTERYX.

Corpus vix robustum. Frons declivis, subproductus, albus. Palpi ascendentes, arcuati; articulus 2us latus; 3us minimus. Antennæ maris laminis validis subspatulatis ciliatis. Tibiæ posticæ incrassatæ, fusiformes. Alæ integræ; anticæ apice quadratæ (*mas*) aut falcatæ (*fœm.*), macula apicali lunata; posticæ angulo interiore producto aut quadrato.

*Gynopteryx*, *Guen. Phal. i. 78.*

Body hardly stout. Front declining, white, obtusely prominent beneath. Palpi ascending, curved; second joint broad; third very small. Hind tibiæ incrassated, fusiform. Wings entire, generally yellow. Fore wings with a semicircular apical spot. Hind wings with the interior angle prominent or quadrate. **Male.** — Antennæ with stout slightly spatulate laminæ, each of which is furnished with a bristle. Fore wings quadrate at the tips; exterior border rounded or slightly bent. **Female.** — Fore wings falcate and very acute at the tips; exterior border often bent or angular.

**A. Alæ plus minusve flavæ.****A. Alæ linea non guttulari.****Δ. Alæ albo non marginatæ.****a. Alæ anticæ spatio medio non rufescente.****i. Alæ non strigatæ.****\* Alæ anticæ spatio marginali obscuro.***gladiaria, Guen.***\*\* Alæ anticæ spatio marginali non obscuro.***Thasusaria, Walk.**seriaria, Guen.***ii. Alæ strigis duabus guttularibus.****b. Alæ anticæ spatio medio rufescente.****i. Alæ posticæ non angulatæ.***rhombaria, Guen.**Telysaria, Walk.***ii. Alæ posticæ angulatæ.***Liodesaria, Walk.**Calbisaria, Walk.***B. Alæ linea guttulari.****B. Alæ non flavæ.***Celeraria, Walk.***Δ. Alæ anticæ costa alba.****Δ. Alæ anticæ costa non alba.***Gygæaria, Walk.**Numicusaria, Walk.***b. Alæ anticæ non maculatæ.****i. Alæ posticæ late marginatæ.***Numicusaria, Walk.***ii. Alæ posticæ non marginatæ.****\* Alæ anticæ costa exteriore subexcavata.***Gaurusaria, Walk.***\*\* Alæ anticæ costa non excavata.****† Alæ anticæ linea apud costam non retracta.***Calexaria, Walk.***†† Alæ anticæ linea costam versus retracta.***Icaunaria, Walk.***1. GYNOPTERYX GLADIARIA.**

**Mas et fœm.** *Ochraceo-flava; alæ subtus conspersæ, linea recta fimbriaque saturatioribus, puncto discali nigro; anticæ macula costali subapicali excavata, linea subtus submarginali vaga.*

*Gynopteryx gladiaria, Guen. Phal. i. 78, 110.*

*Brazil.*

**2. GYNOPTERYX SERIARIA.**

**Mas et fœm.** *G. gladiariæ simillima; alæ nigro magis conspersæ; anticæ strigis duabus e punctis nigris, macula costali subapicali albo notata.*

*Gynopteryx seriaria*, Guen. *Phal.* i. 79, 111.

Brazil. Colombia. Buenos Ayres.

### 3. GYNOPTERYX RHOMBARIA.

*Fœm.* *Pallide ochraceo-flavescens; alæ conferte conspersæ, lineæ obliqua subrecta nigricante, lineæ submarginali angulosa fimbriaque fuscis; anticæ subfalcatæ, lineæ interiore nigricante angulata, spatio inter lineas rufescente, margine exteriori vix flexo; posticæ margine exteriori subangulato.*

*Gynopteryx rhombaria*, Guen. *Phal.* i. 79, 112, pl. 10, f. 4.

Brazil.

### 4. GYNOPTERYX TELYSARIA.

*Fœm.* *Lutea, subtus nigro conspersa; caput supra canum; palporum articulus 3us brevissimus; antennæ subcrenulatæ; alæ lineæ rufescente obliqua subrecta, lineæ exteriori undulata subobsoleta, puncto discali nigro; anticæ subfalcatæ, apice nigro subconsersæ, lineæ interiore angulata, spatio intermedio saturatiore.*

*Female.* Nearly allied to *G. rhombaria*. Luteous, more dull beneath, where the wings are thickly speckled with black. Head hoary above. Palpi cinereous, except towards the base; third joint not more than one-fourth of the length of the second, with which it forms a slight angle. Antennæ minutely crenulated. Wings ample, with a reddish oblique almost straight line; an almost obsolete undulating exterior line; a black discal point. Fore wings subfalcate, slightly speckled with black at the tips; an interior line forming a very acute angle which joins the discal point; space between the lines of a deeper hue than that elsewhere. Length of the body  $5\frac{1}{2}$  lines; of the wings 16 lines.

Rio Janeiro. In Mr. Fry's collection.

### 5. GYNOPTERYX THASUSARIA.

*Fœm.* *Flava; corpus supra cervinum; palpi brevissimi; pedes graciles; alæ fusco subconsersæ, lineæ recta obliqua fusca, margine exteriori subflexo; anticæ subfalcatæ, basi spatioque marginali cervinis, margine exteriori antico subexcavato; posticæ fascia exteriori cervina. Var. β.—Alæ posticæ extus omnino flavæ.*

*Female.* Yellow. Head, thorax and most of the abdomen fawn-colour. Palpi very short, hardly extending beyond the head; third joint very minute. Legs slender. Wings minutely and indistinctly speckled with brown, with a brown straight oblique line, which extends from nearly two-thirds of the length of the interior border of the hind wings, almost to the tips of the fore wings; exterior border hardly angular; fringe ferruginous. Fore wings sub-falcate; basal space fawn-colour, which hue is bounded by an angular brown line; space between the line and the exterior border wholly fawn-colour; exterior border slightly excavated in front. Hind wings fawn-colour for half the space between the line and the exterior border. *Var. β.*—Hind wings with the exterior part wholly yellow. Length of the body 6 lines; of the wings 18 lines.

Rio Janeiro.

α, β. Venezuela. From Mr. Dyson's collection.

#### 6. GYNOPTERYX? NUMICUSARIA.

*Max.* *Pallide murina, vix ferruginosa; antennæ pectinatae, apice simplices; tibiæ posticæ subdilatatae; alæ linea recta obliqua ferruginea, lituris exterioribus pallide cinereis, margine exteriori non flexo; posticæ abdomen longe superans, ferrugineo latissime marginatæ.*

*Male.* Pale mouse-colour, with a slight ferruginous tinge, pale cinereous and without markings beneath. Antennæ pectinated, except near the tips. Hind tibiæ slightly dilated. Wings with a straight oblique ferruginous line, which extends from one-third of the length of the interior border of the hind wings to near the tips of the fore wings, where it is retracted and forms an acute angle; some pale cinereous exterior marks; fringe ferruginous; exterior border slightly convex, neither bent nor angular. Hind wings extending far beyond the abdomen, very broadly-bordered with ferruginous. Length of the body 5 lines; of the wings 18 lines.

α. ———? Presented by E. Doubleday, Esq.

#### 7. GYNOPTERYX? GAURUSARIA.

*Fœm.* *Cervina, subtus ochracea; corpus subtus pallide cinereum; palpi brevissimi; tibiæ posticæ vix incrassatæ; alæ ferrugineo confertissime conspersæ, lineis duabus ferrugineis rectis parallelis, puncto discali nigro, lineis duabus fuscis exterioribus incompletis subarcuatis vix obliquis; antica costa apicem versus concava nigro notata, margine exteriori convexo.*

*Female.* Fawn-colour, ochraceous beneath. Body pale cinereous beneath. Palpi very short. Hind tibiae hardly thickened. Wings very thickly speckled with ferruginous; two ferruginous, straight, parallel lines; the exterior one extending from three-fourths of the costa of the fore wings to one-fourth of the interior border of the hind wings; a black discal point; two exterior incomplete slightly curved nearly upright brown lines. Fore wings with prominent tips; costa with the exterior part marked with black and slightly concave; exterior border convex. Hind wings with the interior angle somewhat prolonged. Length of the body 7 lines; of the wings 21 lines.

This species may belong to the genus *Cratoptera*.

a. Parà. From Mr. Bates collection.

### 8. GYNOPTERYX GYGÆARIA.

*Mas.* *Cinereo-cervina, subtus ochracea; caput antice ferrugineum; palpi vix ascendentes; antennæ pectinatae, apice simplices; tibiæ posticæ subincrassatae; alæ nigro conspersæ, linea ferruginea extus albido submarginata; anticæ subfalcatae, linea postice arcuata, linea interiore ferruginea valde angulata, lituris duabus costalibus diffusis cinereis, puncto discali nigro, plaga fusca maculaque flavescente posticis connexis; posticæ linea subundulata, gutta discali nigra.*

*Male.* Cinereous fawn-colour, ochraceous beneath. Head in front and palpi ferruginous; the latter hardly ascending, with a minute conical third joint. Antennæ pectinated to three-fourths of the length. Hind tibiae slightly incrassated. Wings with a ferruginous line, which is indistinctly bordered with whitish on the outer side; speckles black, very minute, brown and more conspicuous on the under side. Fore wings subfalcate; line curved towards the interior border; a less distinct and very angular ferruginous interior line; two cinereous diffuse costal marks; a black discal point; a brown patch near the interior border connected with a pale yellow spot. Hind wings with the line slightly undulating; discal dot much larger than that of the fore wings. Length of the body 8 lines; of the wings 22 lines.

a. Ega. From Mr. Bates' collection.



## 9. GYNOPTERYX LIODESARIA.

*Mas.* *Flavescente-testacea, subtilus lutea ferrugineo conspersa; caput et thorax antice rufescente-cinerea; alæ amplæ, lineis duabus fimbriaque ferrugineis; antica subfalcata, lineis costam versus angulatis, costa rufescente-cinerea, gutta costali subapicali alba, spatio marginali ex parte olivaceo-fusco.*

*Male.* Yellowish testaceous, bright luteous and much speckled with ferruginous beneath. Head and fore part of the thorax reddish cinereous. Palpi stout, ascending; third joint conical, less than one-fourth of the length of the second. Wings ample; two lines and the fringe ferruginous. Fore wings subfalcate, with a white costal subapical dot; lines angular towards the costa, the exterior one forming the most acute angle; costa reddish cinereous; exterior border convex; marginal space largely shaded with olivaceous-brown. Length of the body 7 lines; of the wings 18 lines.

♂. Venezuela. From Mr. Dyson's collection.

## 10. GYNOPTERYX ? CALBISARIA.

*Mas.* *Flavescente-testacea; caput supra albidum; palpi cervini, subangulati, sat validi, oblique ascendentes; tibiæ posticæ incrassatæ; alæ breviusculæ, extus cervino subinctæ, puncto discali nigro, lineis subtilus duabus integris, 2a angulosa; antica vix falcata, macula costali subapicali lineisque tribus guttularibus fuscis, margine exteriori subrecto; posticæ margine exteriori flexo.*

*Male.* Yellowish testaceous. Head whitish above. Palpi fawn-colour, rather stout, obliquely ascending; third joint minute, conical, forming a slight angle with the second. Antennæ moderately pectinated. Abdomen extending almost as far as the hind wings. Hind tibiæ incrassated. Wings not long, with a pale fawn-coloured tinge about the exterior border, with a black discal point, and with two incomplete lines of brown dots; under side with two complete lines, the submarginal one zigzag. Fore wings hardly falcate, with a brown costal subapical spot, and with an interior oblique line formed of three brown dots; exterior border almost straight. Hind wings with the exterior border bent. Length of the body 6 lines; of the wings 14 lines.

♂. ——— ? From Mr. Milne's collection.

## 11. GYNOPTERYX ? CELERARIA.

**Mas.** *Rufescente-cervina* ; caput, thorax antice costaque albida; palpi porrecti, brevissimi ; antennæ subpectinatae, apice simplices ; tibiæ posticæ non incrassatæ ; alæ nigro subconspersa puncto discali nigro, fimbria alba, fascia subtus submarginali rufescente-nigro submarginata extus dentatâ ; anticæ apice productæ, venis anticis albis, lineis tribus albis, 1a recta, 2a arcuata, 3a angulosa submarginali antice connexis ; posticæ linea una alba subarcuata, atomis apud angulum intermedium nigris.

**Male.** Reddish fawn-colour, with a slight cinereous tinge. Head above, fore part of the thorax and under side mostly whitish. Palpi porrect, very short ; third joint indistinct. Antennæ slightly pectinated, except towards the tips. Legs speckled with brown ; hind tibiæ not incrassated. Wings slightly and minutely speckled with black ; a black discal point ; fringe white ; under side with reddish submarginal band, which is incompletely bordered with black, and is dentated on the outer side. Fore wings with prominent tips ; costa and the adjoining veins white, the former very straight ; exterior border hardly convex ; two white lines ; the exterior one curved, united in front with a zigzag submarginal white line, which is obsolete hindward. Hind wings with one very slightly curved white line ; interior angle produced, speckled with black. Length of the body 6 lines ; of the wings 20 lines.

a. Villa Nova. From Mr. Bates' collection.

## 12. GYNOPTERYX ? CALEXARIA. .

**Mas et fœm.** *Pallide murina, gracilis* ; palpi breves, graciles, arcuati, ascendentes ; pedes graciles, calcari uno longioribus tibiis posticis vix incrassatis ; alæ linea recta obliqua nigra extus rufescente marginata, linea submarginali angulosa albida valde indistincta, fimbria rufescente perbrevis, linea submarginali albida angulosa valde indistincta ; anticæ subfalcatae. **Mas.**—Antennæ subpectinatae.

**Male and female.** Pale mouse-colour, slender. Palpi slender, curved, ascending ; third joint elongate-conical, minute. Abdomen not extending beyond the hind wings. Legs slender ; one of the spurs long ; hind tibiæ hardly thickened. Wings with a black straight oblique line, which is reddish-bordered on the outer side.

and is not visible beneath ; fringe reddish, very short ; exterior border very slightly convex ; a very indistinct zigzag whitish submarginal line, which is more apparent towards the tips of the fore wings ; the latter are subfalcate, and the line does not extend to their tips. *Male*.—Antennæ subpectinated ; the branches short and fine and terminating in bristles. Length of the body  $4\frac{1}{2}$ —5 lines ; of the wings 14 lines.

a, b. Tapayoa. From Mr. Bates' collection.

### 13. GYNOPTERYX ? ICAUNARIA.

*Fœm.* *Nigricante-cinerea, subglauescente ruffusa ; tibiæ posticæ vix incrassatæ ; alæ linea obliqua recta lineaque marginali fuscis extus cinereo marginatis, litura discali fusca ; anticæ acutæ, vix falcatæ, lituris anticis submarginalibus albidis, linea costam versus retracta.*

*Female.* Blackish cinereous, with a slight glaucous tinge. Abdomen not extending beyond the hind wings. Hind tibiæ hardly thickened. Wings moderately broad, with a brown straight oblique line, which is bordered with cinereous on the outer side, and is undulating beneath : a brown cinereous-bordered marginal line and a brown discal mark. Fore wings acute, nearly subfalcate ; some whitish marks along the fore part of the exterior border, which is hardly convex ; line retracted and forming an angle near the costa. Length of the body 3 lines ; of the wings 10 lines.

a. Brazil. From Mr. Argent's collection.

### Genus 5. TETRAGONODES.

*Mas et fœm.* Frons plana. Palpi ascendentes, compressi ; articulus 3us brevissimus, valde truncatus. Antennæ usque ad apices pectinatæ. Tibiæ posticæ fusiformes. Alæ integræ, in utroque sexu similes ; anticæ margine exteriori subflexo ; posticæ margine exteriori angulato.

*Tetragonodes, Macq. Phal. i. 80.*

*Male and female.* Front even. Palpi ascending, compressed ; third joint very short, much truncated at the tip. Antennæ pectinated to the tips. Hind tibiæ fusiform. Wings entire, of the same

## CATALOGUE OF

in both sexes. Fore wings with the exterior border  
Hind wings with the exterior border distinctly angula

### 1. TETRAGONODES ANOPHARIA.

et fem. *Flavescente-testacea; alæ ferrugineo strig  
marmoratæ, subtus magis incarnatæ; antica macula  
semicirculari nigricante-albido lineata, umbris duab  
reis vagis interruptis, nebula anteriore fusca, puncto  
nigro.*

onodes anopharia, *Guen. Phal. i. 80, 112.*

ae.

### Genus 6. PERICLINA.

es et fem. *Frons plana. Palpi recti, frontem vix super  
as filiformes. Pedes postici longi; tibiae non incr  
nplæ, integræ, concolores, flavæ, conspersæ, flumbr  
ri; anticae non falcatae; posticae margine anteriore  
interiore quadrato non producto.*

na, *Guen. Phal. i. 80.*

ale and female. *Front flat. Palpi straight, bare  
; beyond the front. Antennæ filiform. Hind legs  
biae not increased. Wings large, entire, yellow, ap  
i colour; fringe short, of one colour. Fore wings not f  
rings with the exterior border bent; interior angle qu  
longed.*

### 1. PERICLINA CUCURBITATA.

1. *Flava; alæ ochraceo confertissimo conspersæ, sub  
lide flavescente-carnæ, linea recta nigricante extus  
diffuse marginata, linea submarginali angulata indi  
puncto discali nigro; antica linea anteriore non obliqu*

na cucurbitata, *Guen. Phal. i. 81, 114.*

## 2. PERICLINA POMPOLEATA.

*Mas.* Sulphureo-flava; alæ fusco conspersæ, linea violaceo-nigra bene determinata, nebula exteriore flavescens-fusca albo punctata, fimbria cinereo suffusa; anticæ linea valde flexa, linea interiore flexa, puncto discali, margine exteriore convexo; posticæ margine exteriore subflexo.

*Periclina pompoleata*, Guen. *Phal.* i. 81, 115.

Brazil?

## Genus 7. APICIA.

Corpus sat gracile. Frons rotundata, non prominens. Palpi ascendentes, arcuati; articulus 2us latus; 3us brevissimus. Tibiæ posticæ plus minusve incrassatæ; calcaria brevia, remota. Alæ stricæ aut velutinæ, linea recta obliqua, margine exteriore plus minusve flexo. *Mas.*—Antennæ sæpissime pectinatæ. Alæ anticæ apice obtusæ aut quadratæ. *Fem.*—Alæ anticæ apice acutæ, falcate.

*Apicia*, Guen. *Phal.* i. 81.

*Microgonia*, p., et *Microsema*, p., Herr.-Sch. *Lep. Exot.* 28, 29, 41, 43.

Body rather slender. Front rounded, not prominent. Palpi ascending, curved; second joint broad; third very short. Hind tibiæ more or less thickened; spurs short, remote from each other. Wings silky or velvety, with a straight oblique line; exterior border more or less bent; fringe of moderate length. *Male.*—Antennæ pectinated, except towards their tips, wholly filiform in one species. Fore wings obtuse or quadrate at the tips. *Female.*—Fore wings acute, falcate.

## North America.

## 1. APICIA SPINETARIA.

Luteo-flava, subtus nigro conspersa; caput cervinum, albo fasciatum; alæ lineis duabus obliquis croceis subtus fuscis, linea submarginali angulosa subtus conspurca, puncto discali nigro, margine exteriore flexo; anticæ subfalcatæ, litura costali subapicali nigra, linea interiore antice angulata.

*Apicia spinetaria*, Guen. *Phal.* i. 85, 123.

North America. Rio Janeiro.

## 2. APICIA JUNCTURARIA.

**Fœm.** *Pallide flava; alæ linea tenui concisa castanea; anticae linea recta, linea interiore valde arcuata, spatio basali marginæque lato carneo-cinereis; posticae linea subarcuata, margine exteriori flavescente tincto.*

*Apicia juncturaria, Guen. Phal. i. 88, 132.*

North America? Brazil?

## Mexico.

## 3. APICIA ARBUARIA.

**Mas.** *Cervina; tibiæ posticæ incrassatæ, apices versus fasciculatæ; alæ brevisculæ, nigro subconsersæ, linea albida recta distincta intus fusco diffusæ marginata, linea exteriori e maculis diffusis nigricantibus, puncto discali nigro; anticae subfalcatæ, linea apud costam angulata, margine exteriori convexo non flexo; posticæ margine exteriori subflexo.*

**Male.** Fawn-colour, a little paler and with a cinereous tinge beneath. Hind tibiæ much incrassated, tufted near their tips. Wings rather short, slightly and very minutely speckled with black; line whitish, straight, distinct, diffusedly bordered with brown on the inner side; an exterior line indicated by diffuse blackish spots, more distinct beneath; a black discal point. Fore wings slightly falcate; line forming an acute angle near the costa; exterior border convex, not bent. Hind wings with the exterior border slightly bent. Length of the body  $6\frac{1}{2}$  lines; of the wings 13 lines.

a. Mexico. Presented by E. Doubleday, Esq.

## West Indies.

## 4. APICIA? RITHRUSARIA.

**Fœm.** *Pallide lignicolor; alæ brevisculæ, nigro-fuscoque subconsersæ, lineis duabus subobliquis cervinis, 1a tenui undulata fusco notata, 2a recta lata fusco submarginata, punctis marginalibus nigris; anticae falcatæ, obtusæ, linea exteriori nigro bimaculata, margine exteriori recto; posticæ margine exteriori flexo.*

*Female.* Pale wood-colour, brighter beneath. Wings slightly and minutely speckled with black or brown, rather short, with two slightly oblique bright fawn-coloured lines; interior line slight, undulating, partly brown-marked; exterior line straight, broad, slightly and incompletely brown-bordered; a row of black marginal points. Fore wings obtusely falcate; two blackish spots on the exterior line; exterior border straight, except towards the tip, where it is slightly excavated. Hind wings with the exterior border bent. Length of the body 5? lines; of the wings 12 lines.

a. St. Domingo. From Mr. Tweedie's collection.

### South America.

A. Alæ non aut vix dentatæ.

A. Alæ olivaceo non variæ.

a. Alæ posticæ lineæ non duplicata.

a. Alæ non angustæ.

i. Alæ anticæ non falcatæ. - - Agathoaria, Walk.

ii. Alæ anticæ subfalcatæ.

\* Alæ anticæ lineæ submarginali non guttulari.

† Alæ subtus non marginatæ.

‡ Alæ anticæ macula nulla postica.

§ Alæ lineæ umbrata. - Cayennaria, Guen.

§§ Alæ lineæ non umbrata.

→ Alæ testaceæ.

++ Alæ anticæ lineæ interiore distincta. - alteraria, Guen.

++++ Alæ anticæ lineæ interiore subobsoleta. Ilairaria, Walk.

→→ Alæ cinerascens.

Alphiusaria, Walk.

→→→ Alæ rufescentes. Opiteraria, Walk.

‡‡ Alæ anticæ macula postica.

distycharia, Guen.

†† Alæ subtus late marginatæ. - quartaria, Guen.

\*\* Alæ anticæ lineæ submarginali guttulari.

† Alæ lignicolores. - - trifilaria, Herr.-Sch.

†† Alæ luteo-flavæ. - - - Uxiaria, Walk.

iii. Alæ anticæ valde falcatæ. - - præustaria, Guen.

b. Alæ angustæ. - - polygrapharia, Herr.-Sch.

a. Alæ posticæ lineæ duplicata.

a. Alæ anticæ lineæ recta. - - - lintearia, Guen.

b. Alæ anticæ lineæ subarcuata. - - Rhumata, Walk.

**B. Alæ olivaceo variæ.****A. Alæ non marmoratæ.****a. Alæ non sericeæ.****i. Alæ extus carneo non nebulosæ.****\* Alæ linea non punctulari.**† Alæ spatio marginali obscuro. holmiaria, *Guen.*

†† Alæ spatio marginali non obscuro.

Arnetaria, *Guen.*\*\* Alæ linea punctulari. - - - - - ovaria, *Guen.*ii. Alæ extus carneo nebulosæ. - - - - - exararia, *Guen.*b. Alæ sericeæ. - - - - - fundaria, *Guen.*B. Alæ marmoratæ. - - - - - impexaria, *Guen.*B. Alæ dentatæ. - - - - - jaspidaria, *Guen.***5. APICIA CAYENNARIA.**

Mas et fœm.—*Testacea, pallida; alæ nigro conferte conspersæ, linea obliqua subrecta albida intus rufescente submarginata, spatio exteriori fusco; anticæ subfalcatae, strigis tribus costalibus obliquis, 1a angulata postice attenuata, puncto discali nigro. Mas. — Alæ fascia submarginali fimbriaque nigricantibus.*

*Apicia Cayennaria, Guen. Phal. i. 82, 116, pl. 5, f. 2, 3.*

Cayenne.

**6. APICIA ALTERARIA.**

Mas et fœm. A. Cayennariæ simillima; alæ pallidiores, minus conspersæ, linea recta tenuiore non umbrata, linea interioris angulo bene determinato.

*Apicia alteraria, Guen. Phal. i. 83, 117.*

Cayenne.

**7. APICIA DISTYCHARIA.**

Mas. A. Cayennariæ simillima; alæ multo pallidiores, minus conspersæ, linea exteriori fusca extus diffusa bene determinata, linea interiori flexa, umbra media nulla; anticæ macula apud angulum interiorem magna nigra; posticæ linea subarcuata.

*Apicia distycharia, Guen. Phal. i. 83, 118.*

Cayenne.



## 8. APICIA QUARTARIA.

**Fœm.** *Pallide testacea, A. Cayennarise affinis; alæ nigro conferte conspersæ, linea exteriori tantum distincta, margine lato subtus violaceo-cinereo; anticæ magis falcatæ, linea recta, macula rotundata apud angulum interiorem maculaque discali parva nigris; posticæ linea postice indeterminata.*

*Apicia quartaria, Guen. Phal. i. 83, 119.*

Brazil.

**Var.?** *Pallide lignicolor; alæ latiusculæ, nigro-fuscoque conspersæ purpurascente subinctæ, linea fusca tenui extus pallido marginata, puncto discali nigro, margine exteriori vix flexo; anticæ falcatæ, lituris costalibus fuscis, maculis duabus exterioribus nigricantibus, posteriore sat magna nonnunquam obsoleta, linea costam versus angulata, margine exteriori valde convexo.*

**Var.?** Pale wood-colour. Wings thickly and regularly speckled with black or brown, very slightly purplish-tinged, rather broad; line brown, slight, pale-bordered exteriorly, almost obsolete in the hind wings; discal black point distinct; exterior border hardly bent. Fore wings falcate, with one or two oblique brown marks along the costa; a blackish spot near the interior angle, and a smaller one above the first; both occasionally obsolete; line forming an acute angle near the tip of the wing; exterior border very convex. Length of the body 6 lines; of the wings 16 lines.

Rio Janeiro. In Mr. Fry's collection.

## 9. APICIA HOLMIARIA.

**Fœm.** *Testaceo-cinerea; alæ olivaceo-cinereo conspersæ, linea exteriori recta tenui albida intus marginata, spatio marginali olivaceo-cinereo; alæ anticæ basi pallidiores, magis strigatæ, linea interiori nebulosa valida arcuata, puncto discali nigro.*

*Apicia holmiaria, Guen. Phal. i. 84, 120.*

Brazil.

## 10. APICIA ARNETARIA.

**Fœm.** *Pallide testacea; alæ fusco conspersæ, olivaceo ex parte suffusæ, linea olivaceo-fusco umbrata; anticæ lineæ exterioris angulo valde acuto, linea interiori sinuata; posticæ linea exteriori subarcuata disjuncta.*

*Apicia Arnetaria*, Guen. *Phal.* i. 84, 121.

Brazil.

### 11. *APICIA OVARIA.*

**Fœm.** *Testaceo-cinerea; alæ olivaceo tinctæ, linea punctulari vix conspicua, linea interiore albida tenui angulosa; anticæ gutta discali nigra, angulo marginis exterioris bene determinato; posticæ margine exteriori non flexo, angulo interiore producto.*

*Apicia ovaria*, Guen. *Phal.* i. 84, 122.

Brazil.

### 12. *APICIA PRÆUSTARIA.*

**Fœm.** *Pallide carneo aut flavesciente-cinerea; alæ conspersæ, linea recta duplicata nigra, maculis exterioribus nigricantibus, puncto discali nigro; anticæ valde falcatae, apice nigro repletæ, margine exteriori subflexo.*

*Apicia præustaria*, Guen. *Phal.* i. 85, 124.

Brazil.

### 13. *APICIA TRIFILARIA.*

**Mas.** *Testaceo-albida; antennæ pectinatae; alæ strigulis transversis nigris, linea obliqua subrecta nigra, extus albo marginata; anticæ vix falcatae, linea interiore antice abbreviata, linea submarginali guttulari, puncto discali nigro, margine exteriori subflexo; posticæ margine exteriori subangulato.*

*Microsema trifilaria*, Herr.-Sch. *Lep. Exot.* 43, f. 337.

*Apicia trifilaria*, Guen. *Phal.* i. 85, 125.

Colombia.

**Var.?** **Mas.** *Albido-lignicolor; caput et thorax antice fusca; alæ nigro subconsersæ, linea recta obliqua nigra antice attenuata, puncto discali nigro, margine exteriori angulato; anticæ subfalcatae, linea costam versus angulata, linea interiore tenui obliqua nigra antice abbreviata, spatio marginali cinerascens lineas nigras includente; posticæ fusco strigatae.*

**Var.?** **Male.** Whitish wood-colour. Head and thorax brown in front. Wings minutely speckled with black, with a straight oblique black line, which is attenuated in front, and is much broader on the fore wings than on the hind wings; a black discal point which is larger on the hind wings than on the fore wings; exterior

border angular. Fore wings subfalcate, with the line forming a subapical angle; a slender oblique interior black line, which is obsolete in front and is sometimes jagged, sometimes straight; marginal space tinged with cinereous, containing a line of blackish dots. Hind wings transversely streaked with brown. Length of the body 6 lines; of the wings 14 lines.

Rio Janeiro. In Mr. Fry's collection.

#### 14. APICIA LINTEARIA.

*Mas et fœm.* *Pallide flavescens; antennæ maris pectinatæ; alæ subconspersæ, linea subarcuata ferruginea, puncto discali nigro; anticæ acutæ, litura costali subapicali nigra, linea extus albido marginata, linea interiore rufescente antice abbreviata postice intus diffusa, spatio marginali fuscescente lineam obscuriorem includente, margine exteriori flexo; posticæ lineæ duplicata, linea submarginali fuscescente, spatio marginali antico fusco, margine exteriori subangulato.*

*Apicia lintearia*, Guen. *Phal.* i. 86, 126, pl. 12, f. 1.

Brazil.

*Var.? Mas.* *Pallide cinereo lignicolor; alæ linea recta obliqua fuscescente extus cinereo marginata, linea exteriori indistincta diffusa fuscescente, margine exteriori subangulato; anticæ viz falcatæ, macula apicali albida nigro notata, puncto discali nigro, spatio marginali fuscescente-cinereo; posticæ cervinæ, strigatæ, gutta discali nigra.*

*Male.* Pale wood-colour, with a cinereous tinge. Thorax in front and abdomen at the tip brownish. Wings with an oblique straight brownish line, which is bordered with cinereous on the outer side, and has an indistinct and diffuse brownish line beyond it; exterior border slightly angular. Fore wings hardly falcate, with a whitish black-marked apical spot, and with a black discal point; space beyond the line brownish cinereous. Hind wings with minute transverse fawn-coloured streaks, and with a black discal dot. Length of the body 6 lines; of the wings 16 lines.

Rio Janeiro. In Mr. Fry's collection.

15. *APICIA POLYGRAPHARIA.*

**Mas.** *Ochraceo-flavescens* ; antennæ filiformes ; tibiæ posticæ non incrassatæ ; alæ angustæ, nigro conspersæ, rufescente strigatæ, linea exteriorè obliqua recta alba, puncto discali nigro, marginis exterioris angulo bene determinato ; anticæ linea mediæ antice abbreviata, linea exteriorè intus nigro punctata.

*Microgonia polygrapharia*, Herr.-Sch. *Lep. Exot.* 41, f. 369.

*Apicia polygrapharia*, Guen. *Phal.* i. 86, 127.

Brazil.

16. *APICIA EXARARIA.*

**Mas et form.** *Pallide testacea* ; alæ linea tenui nigro lineata, intus olivaceo nebulosæ extus carneo nebulosæ, marginis exterioris angulo bene determinato ; anticæ conspersæ, lituris duabus costalibus subapicalibus nigris ; posticæ strigis transversis cinereis, linea recta viridi nebulosa.

*Apicia exararia*, Guen. *Phal.* i. 87, 128.

Brazil.

17. *APICIA JASPIDARIA.*

**Mas.** *Pallide ochracea* ; alæ denticulatæ, sat angustæ, nigro conspersæ, fasciis variis sordide carneis et olivaceis ; anticæ lituris costalibus unaque apud angulum interiorem nigris, margine exteriorè angulato ; posticæ margine exteriorè vix angulato.

*Apicia jaspidaria*, Guen. *Phal.* i. 87, 129, pl. 11, f. 3.

Brazil.

18. *APICIA FUNDARIA.*

**Mas.** *Pallide flavescente-cinerea* ; tibiæ posticæ incrassatæ ; alæ sericeæ, linea subolivaceo-flava recta bene determinata ; anticæ subfalcatæ, apice subolivaceæ, linea interiorè angulata indistincta, margine exteriorè flexo. Var.  $\beta$ .—*Obscurior* ; alæ subolivaceæ, venis pallidioribus, linea læte flava, maculis exterioribus nigricantibus ; tibiæ posticæ minus incrassatæ.

*Apicia fundaria*, Guen. *Phal.* i. 87, 131.

Brazil.

## 19. APICIA IMPEXARIA.

**Mas.** *A. fundariæ valde affinis; tibiæ posticæ incrassatæ; alæ strigis nebulisque olivaceis confertim marmoratæ, linea tenuiore magis concisa, linea interiore arcuata non angulata, maculis tribus submarginalibus, margine exteriori subnigricante.*

*Apicia impexaria, Guen. Phal. i. 88, 131.*

Colombia.

## 20. APICIA RHUMATA.

**Mas.**—*Pallidissime lignicolor; thorax antice fuscus; abdomen fusco fasciatum; alæ fusco subconspersæ, linea subrecta obscure fusca intus fusco pallido late marginata extus albido marginata, puncto discali nigro, margine exteriori angulato; anticæ subfalcatæ, obtusæ, linea apicem versus subrectangulata, spatio exteriori purpurascence-cinereo, linea interiore obliqua fusca valde obliqua; posticæ fusco strigatæ, plaga apicali purpurascence-cinerea. Fœm. — Alæ spatio purpurascence-cinereo subobsoleto.*

Very nearly allied to *A. lintearia*. **Male.**—Very pale wood-colour. Thorax brown in front. Abdomen with pale brown bands. Hind tibiæ incrassated. Wings slightly and very minutely brown-speckled; line dark brown, almost straight, broadly-bordered with pale brown on the inner side, concisely whitish-bordered on the outer side; a black discal point; exterior border distinctly bent or obtusely angular. Fore wings subfalcate; line retracted and almost rectangular near the tip, which is somewhat obtuse; space between the line and the exterior border purplish cinereous; an interior oblique brown line, which is only apparent on the hind half. Hind wings transversely streaked with brown, with a purplish cinereous apical patch. **Female.**—Wings with the line less distinct; purplish cinereous hue almost wanting. Length of the body 5 lines; of the wings 12—14 lines.

Rio Janeiro. In Mr. Fry's collection.

## 21. APICIA NAZADARIA.

**Mas.** *Pallide testacea; caput album; alæ subtus fusco conspersæ, linea obliqua recta indistincta vix obscuriore, puncto discali nigro; anticæ vix falcatæ, lunula subapicali alba nigro marginata, costa basi fusca, margine exteriori convexo; posticæ margine exteriori subflexo.*

*Male.* Pale testaceous. Head white above. Wings with brown speckles, which are almost obsolete above, but distinct on the under side; line straight, oblique, indistinct, a little darker than the ground hue on its inner side, but not darker than that about the exterior border; a minute black discal point. Fore wings hardly falcate, with a white black-bordered subapical lunule; exterior border very slightly convex; costa brown towards the base. Hind wings with the exterior border slightly bent. Length of the body  $5\frac{1}{2}$  lines; of the wings 16 lines.

Rio Janeiro. In Mr. Fry's collection.

## 22. APICIA UXIARIA.

*Mas.* *Flava; caput album; tibiæ posticæ incrassatæ; alæ nigro subconspersæ, lineis duabus indistinctis cinereis nigro guttatis, 1a fere recta, 2a subundulata, puncto discali nigro, margine exteriori convexo; anticæ subfalcatæ, striga apicali obliqua nigra, linea interiore e guttis tribus nigris.*

*Male.* Yellow, paler beneath. Head white above. Hind tibiæ incrassated. Wings thinly and minutely speckled with black, with two lines composed of black dots, which are indistinctly connected with cinereous; first line almost straight; submarginal line slightly undulating; a black discal point; exterior border convex. Fore wings subfalcate, with a black oblique apical streak; an interior line composed of three black dots. Length of the body  $6\frac{1}{2}$  lines; of the wings 15 lines.

This species is similar to *A. spinetaria* in structure.

Rio Janeiro. In Mr. Fry's collection.

## 23. APICIA ALPHIUSARIA.

*Mas.* *Pallide cinerea, nigro conspersa, vix lignicolor; tibiæ posticæ incrassatæ; alæ linea nigricante obliqua subrecta vix undulata, puncto discali nigro, margine exteriori vix flexo; anticæ vix falcatæ, lituris tribus costalibus obscure fuscis, linea costam versus angulata; posticæ linea subtus exteriori tenui arcuata fuscescente.*

*Male.* Pale cinereous, black-speckled, with a slight wood-coloured tinge. Hind tibiæ incrassated. Wings with an oblique, almost straight, but very slightly undulating blackish line, and with

a black discal point; exterior border hardly bent. Fore wings hardly falcate, with three dark brown costal marks; the line abruptly retracted and acutely angular near the costa, where it joins the second mark. Hind wings beneath with a slender curved exterior brownish line, which approaches the first line at each end. Length of the body  $6\frac{1}{2}$  lines; of the wings 16 lines.

Rio Janeiro. In Mr. Fry's collection.

#### 24. APIOLA? AGATHOARIA.

*Ma.* Subcervino-cinerea, subtilis ochracea; caput supra albidum; tibiæ posticæ subincrassatæ; alæ breviusculæ, fusco conspersæ, margine exteriori non flexo; anticæ acutæ, non falcatæ, costa subconvexa fusco notata, lineis duabus fuscis obliquis incompletis, 2a apud costam angulata alboque lineata, apice quadrato, margine exteriori convexo, litura subtilis apicali obliqua nigra.

*Male.* Cinereous, with a slight wood-coloured tinge, orange beneath. Head whitish above. Hind tibiæ slightly thickened. Wings rather short, transversely speckled with brown; exterior border not bent. Fore wings acute, not falcate; costa slightly convex, with oblique brown marks; two oblique incomplete and irregular brown lines; the exterior one very abruptly retracted and acutely angular near the costa, where it is lined with white; a black discal point; tips quadrate; exterior border convex; under side with a black oblique apical mark. Length of the body 4 lines; of the wings 12 lines.

*a. Ega.* From Mr. Bates' collection.

#### 25. APICIA? GAUNABIA.

*Fem.* Rufescente-cervina; caput supra et abdomen apice alba; abdominis latera apicem versus fasciculata; tibiæ posticæ incrassatæ, fasciculatæ; alæ linea recta obliqua alba intus rufescente marginata, puncto discali nigro; anticæ vix falcatæ, linea apicem versus angulata, margine exteriori recto; posticæ margine exteriori vix flexo. *Var. β.*—Alæ anticæ nebulis cinereis.

*Female.* Reddish fawn-colour. Head above and abdomen towards the tip white. Palpi not extending beyond the head; third

joint extremely short. Antennæ minutely setulose. Abdomen tufted on each side towards the tip. Hind tibiæ incrassated, tufted hindward. Wings with a white straight oblique line, bordered with reddish on its inner side; a black discal point. Fore wings with the line forming a subapical angle; tips hardly falcate; exterior border straight. Hind wings with the exterior border hardly bent. *Var. β.*—Fore wings partly clouded with cinereous, this hue being chiefly between the line and the exterior border. Length of the body  $6\frac{1}{4}$  lines; of the wings 15 lines.

Rio Janeiro. In Mr. Fry's collection.

### Country unknown.

#### 26. APICIA INCOPULARIA.

*Fœm. A. juncturarum affinis; alæ viridescens-flavæ, strigulis plus determinatis, margine exteriori magis angulato, anticæ acutiores, linea interiore angulata; posticæ linea subrecta.*

*Apicia incopularia, Guen. Phal. i. 89, 133.*

### Genus 8. SCARDAMIA.

*Mas.* Frons quadrata, plana, velutina. Vertex productus, rectangulatus. Palpi crassi, squamosi, contigui; articulus 3us brevissimus. Antennæ pectinatæ. Abdomen cristatum. Tibiæ posticæ graciles; calcaria longa. Alæ velutinæ, integræ, rotundatæ, bilineatæ, margine exteriori non angulato nec flexo.

*Scardamia, Guen. Phal. i. 89.*

*Male.* Front quadrate, flat, velvety. Vertex prominent, rectangular. Palpi thick, squamous, contiguous; third joint very short. Antennæ pectinated; branches slender. Abdomen with the first and second segments crested. Hind tibiæ slender, with long spurs. Wings velvety, entire, rounded, with two complete lines, silky beneath; exterior border without any flexure.

#### 1. SCARDAMIA METALLARIA.

*Mas. Fulvens; vertex violaceo metallico ochraceoque varius; thorax antice metallico-violaceus; alæ aurato-flavæ, violaceo-carneo tinctæ, lineis duabus subarcuatis punctisque submarginalibus nitentibus metallico-cinereis; anticæ costa violaceo-cinerea.*



*Scardamia metallaria*, Guen. *Phal.* i. 89, 134.

Hindustan.

## Genus 9. MELINODES.

**Max.** Corpus gracile. Antennæ non pectinatæ. Abdomen non cristatum. Alæ integræ, lineis nullis metallicis, margine exteriori non angulato nec flexo; anticæ non acutæ, margine exteriori subconvexo; posticæ rotundatæ.

*Melinodes*, Herr.-Sch. *Lep. Exot. Texte* 44. Guen. *Phal.* i. 90.

**Male.** Body slender. Antennæ not pectinated. Abdomen not crested. Wings entire, with no metallic lines; exterior border not angular nor bent. Fore wings rounded at the tips; exterior border slightly convex. Hind wings much rounded.

### 1. MELINODES DETERSARIA.

*Late crocea; alæ linea nigricante, puncto discali punctisque marginalibus nigris; anticæ linea interiore subarcuata, linea submarginali undulata, spatio inter lineas obscuriore; posticæ linea flexa, litura apud angulum interiorem alba.*

*Melinodes detersaria*, Herr.-Sch. *Lep. Exot.* 44, f. 312. Guen. *Phal.* i. 90, 135.

Colombia.

### 2. MELINODES? AMPHISARIA.

**Max.** Ferruginea, subtus lutea, rufo varia; palpi caput vix superantes, articulo 3o minimo; antennæ longiusculæ, subsetulosæ; tibiæ posticæ incrassatæ; alæ linea obliqua recta obscuriore extus albido marginata; anticæ non falcatae, linea interiore rufescente subarcuata, margine exteriori recto sal obliquo.

**Male.** Ferruginous-red, luteous beneath. Palpi hardly extending beyond the head; third joint extremely minute. Antennæ minutely setulose, rather long and slender. Hind tibiæ incrassated. Wings with a straight oblique darker line, which is bordered with whitish on the outer side; under side transversely streaked with red, which hue forms a marginal band on the fore wings, and on the hind wings an exterior band and a submarginal band. Fore wings not falcate; an interior slightly curved reddish line; exterior border

straight, rather oblique. Hind wings with the exterior border convex; interior angle rather prominent. Length of the body 5 lines; of the wings 12 lines.

*a.* Ega. From Mr. Bates' collection.

## Genus 10. PRIOCYCLA.

*Mas.* Corpus sat robustum. Fasciculus frontalis productus. Palpi porrecti, caput paullo superantes; articulus 3us conicus, minimus. Antennæ sat late pectinatæ. Abdomen alas posticas non superans. Tibiæ posticæ incrassatæ. Alæ mediocres; anticæ non falcatae, costa convexa, margine exteriori convexo dentato; posticæ margine exteriori valde dentato.

*Priocycla*, *Guen. Phal.* i. 90.

*Male.* Body moderately stout. Frontal tuft prominent. Palpi porrect, extending a little beyond the head; third joint conical, very minute. Antennæ rather broadly pectinated. Abdomen not extending beyond the hind wings. Hind tibiæ incrassated. Wings moderately broad; exterior border dentate or scalloped. Fore wings not falcate; costa convex; exterior border convex, slightly oblique. Hind wings with the excavations of the exterior border much deeper than those of the fore wings.

### 1. PRIOCYCLA ARMATARIA.

*Mas.* *Ferrugineo-cervina, subtus lutea; alæ linea exteriori subundulata fusca intus ferrugineo late marginata, spatio ad huc exteriori purpurascens-cinereo suffuso; anticæ linea interiori ferruginea obliqua subundulata, costa ex parte cana.*

*Geometra armataria*, *Herr.-Sch. Lep. Exot.* f. 373, 374.

*Priocycla armataria*, *Guen. Phal.* i. 91, 136.

*a—f.* United States. Presented by E. Doubleday, Esq.

## Genus 11. THERAPIS.

Corpus sat robustum. Frons prominens, obtusa. Palpi breves, declivi, obtusi; articulus 3us minimus. Abdomen alas posticas non superans. Metatarsus anticus longus. Tibiæ posticæ subincrassatæ. Alæ mediocres; anticæ falcatae, margine exteriori

obtusè angulato antice excavato; posticæ margine exteriorè dentato. *Mas.*—Antennæ ramulis longis pubescentibus. *Fæm.*—Antennæ moniliformes.

*Therapia*, Hübn. *Verz. Schm.* 287; *Leder*; *Guen. Phal.* i. 91.

*Enomus*, p., *Treit.*; *Boisd.*; *Dup.*

*Pericallia*, Herr.-Sch. *Eur. Schm.* iv. 48.

Body moderately stout. Front prominent, obtuse. Palpi short, declining, obtuse; third joint very minute. Abdomen not extending beyond the hind wings. First joint of the fore tarsi longer than the fore tibiæ; hind tibiæ slightly incrassated. Wings moderately broad. Fore wings falcate; exterior border forming a prominent much rounded angle, excavated from thence to the tip. Hind wings with the exterior border scalloped. *Male.*—Antennæ with long slender pubescent laminæ. *Female.*—Antennæ moniliform.

### 1. THERAPIS EVONYMARIA.

*Ochraceo-cervina*; alæ nigro conspersæ, linea saturatione arcuata nigro punctata, spatio exteriorè saturatiore, fimbria basi ferruginea, linea interiorè incompleta nigricante; anticæ lituris costalibus nigris.

*Geometra evonymaria*, Wien. *Verz.* 103, 5. *Ill. N. Ausg. dess.* i. 400, 5. *Götz. Ent. Beytr.* iii. 5, 394, 135. *Hübn. Geom.* pl. 6, f. 31.

*Therapis evonymaria*, Hübn. *Verz. Schm.* 288, 2800. *Guen. Phal.* i. 92, 137.

*Enomus evonymaria*, *Treit. Schm.* vi. 1, 67, 26. *Dup. Lép.* iv. 165, pl. 145, f. 3. *Boisd. Ind.* 182, 1439.

*Pericallia evonymaria*, Herr.-Sch. *Eur. Schm.* iv. 48, 125.

a, b. Europe. From M. Becker's collection.

### Genus 12. DREPANOGYNIS.

*Mas et fæm.* Frons valde depressa, subproducta. Palpi lati, squamosi, compressi, trigoni; articulus 3us minimus. Tibiæ posticæ non incrassatæ; tarsi inermes. Alæ velutinæ; fimbria brevis. *Mas.*—Antennæ pectinatæ; rami longi, approximati. Alæ anticæ sat acutæ; posticæ dentibus obtusis. *Fæm.*—Alæ anticæ falcatæ, valde acutæ; posticæ dentibus acutis.

*Drepanogynis*, *Guen. Phal.* i. 92.

*Male and female.* Front much depressed, with a slight incumbent prominence between the palpi. Palpi broad, squamous, compressed, triangular; third joint not distinct. Hind tibiæ not incrassated; tarsi unarmed. Wings velvety; fringe short. *Male.*—Antennæ pectinated to their tips; branches long, serried. Fore wings moderately acute. Hind wings with obtuse teeth. *Female.*—Fore wings falcate, very acute. Hind wings with acute teeth.

### South America.

#### 1. DREPANOGENIS EVERSARIA.

*Fœm.* *Carneo-cinerea*; alæ anticæ basi subconspersæ, lineis duabus remotis indistinctis, 1a vaga dentata, 2a concisa flexuosa flavescens-alba ferrugineo marginata apud costam flexa, puncto discali nigro, atomis marginalibus nigricantibus; posticæ albo-cinereæ, lituris nullis.

*Drepanogynis eversaria*, Guen. *Phal.* i. 93, 140.

### South Africa.

#### 2. DREPANOGENIS MIXTARIA.

*Fœm.* *Pallide testaceo-cinerea*; alæ fusco strigatæ, lineis duabus concisis dentatis valde sinuatis ferrugineo marginatis, nebula interiore ferruginea, spatio exteriori obscuriore cinerascens; anticæ maculis tribus exterioribus nigris vagis.

*Drepanogynis mixtaria*, Guen. *Phal.* i. 93, 138.

Cape. Central Africa.

#### 3. DREPANOGENIS REGULARIA.

*Fœm.* *Columbino-cinerea*; alæ lineis duabus et atomis nigris valde indeterminatis, margine lato cinereo obscuriore, fimbria albida ferrugineo punctata; anticæ striga apicali obliqua.

*Drepanogynis regularia*, Guen. *Phal.* i. 93, 139.

Cape.

## Genus 13. SYNOMOS.

*Fem.* Frons globosa. Proboscis robusta. Palpi frontem vix superantes; articulus 3us distinctus, brevissimus. Antennæ longæ, setaceæ. Pedes longi, graciles; tibiæ posticæ non incrassatæ; tarsi spinosi. Alæ longæ, læves, concolores, dentatæ; anticæ acutæ, falcatæ, margine exteriori angulato; posticæ dentatæ.

*Synomos*, *Guen. Phal.* i. 94.

*Female.* Front globose, not tufted. Proboscis robust. Palpi hardly passing the front; third joint distinct, very short. Antennæ long, setaceous. Legs long, slender; hind tibiæ not incrassated; tarsi spinose. Wings long, smooth, alike in colour, dentate. Fore wings acute, falcate; exterior border angular. Hind wings dentate.

## 1. SYNOMOS FIRMAMENTARIA.

*Fœm.* *Violaceo-fusca; alæ squamis albo glaucescentibus aut viridescentibus, macula magna discali rotundata glaucescente punctum nigrum includente nigroque squamosa, linea exteriori punctata, linea submarginali e maculis nigris contiguis; anticæ linea interiore e maculis.*

*Synomos firmamentaria*, *Guen. Phal.* i. 94, 141.

Mexico.

## Genus 14. EPIONE.

Corpus gracile. Frons rotundata. Proboscis valida. Palpi vix ascendentes, caput paullo superantes; articulus 3us minimus. Abdomen alas posticas non superans. Tibiæ posticæ non incrassatæ, calcaribus longis æqualibus. Alæ velutinæ, margine exteriori æpissime flexo antice excavato; anticæ rectangulatæ. *Mas.*—Antennæ pectinatæ, apice nudæ, rarissime simplices.

*Eanomus*, p., *Treit.*; *Boisd.*

*Epione*, *Dup.*; *Steph.*; *Guen.*

*Euchlæna*, p., et *Cepphis*, p., *Hübner. Verz. Schm.* 293.

*Epione* et *Plagodes*, *Herr.-Sch.*

Body slender. Front rounded, not prominent. Proboscis stout. Palpi hardly ascending, extending rather beyond the front; third joint extremely minute. Abdomen not extending beyond the hind wings. Hind tibiæ not incrassated; spurs long, equal. Wings velvety, moderately broad. Fore wings generally rectangular at

the tips; exterior border generally bent; the bend often preceded by an excavation. Hind wings with the exterior border more decidedly bent and excavated than that of the fore wings; hind part somewhat truncated. *Male*.—Antennæ (except in one species) pectinated to three-fourths of the length.

## Europe.

### A. Alæ flavescentes.

A. Alæ linea valde undulata. - - vespertaria, *Linn.*

### B. Alæ linea subundulata.

A. Statura minor. Alæ breviores. - apiciaria, *Wien. Verz.*

B. Statura major. Alæ longiores. - acuminaria, *Eversm.*

B. Alæ albido-cinereæ. - - - advenaria, *Hübner.*

### 1. EPIONE VESPERTARIA.

*Flavescens; alæ ochraceo transverse strigatæ, linea undulata fusca extus chalybeo marginata, spatio exteriori purpurascence-cinereo plagas flavescentes includente, puncto discali nigricante; antica linea interiore arcuata chalybeo-fusca.*

*Phalæna-Geometra vespertaria*, *Linn. Syst. Nat.* i. 864, 224; *Gmel. ed. Syst. Nat.* i. 5, 2469, 224.

*Geometra vespertaria*, *Fabr. Sp. Ins.* ii. 249, 42; *Mant. Ins.* ii. 191, 62; *Ent. Syst.* iii. 2, 149, 74. *Bergst. Ins. Suec.* i.

*Geometra parallelaria*, *Wien. Verz.* 104, 15. *Schr. Faun. Boic.* ii. 2, 18, 1634. *Hübner. Geom.* pl. 9, f. 43, 44. *Esp. Schm.* v. 84, pl. 15, f. 4—6. *Gotz. Ent. Beytr.* iii. 3, 395, 140. *Ill. N. Ausg. dess.* i. 411, 15.

*Geometra repandaria*, *Hübner. Berl. Mag.* iv. 5, 508, 6. *Naturf.* xi. 65, 6.

*Geometra affiniaria*, *Bork. Eur. Schm.* v. 136, 55,

*Euchlæna vespertaria*, *Hübner. Verz. Schm.* 293, 2843.

*Ennomos parallelaria*, *Treit. Schm.* vi. 1, 31, 15. *Frey. Beitr.* pl. 42. *Boisd. Ind.* 183, 1443.

*Epione parallelaria*, *Dup. Lép.* iv. 216, pl. 148, f. 2. *Herr.-Sch. Eur. Schm.* iii. 49, 127. *Steph. Ill. Brit. Haust.* iii. 204, 2. *Guen. Phal.* i. 96, 142.

a, b. York. Presented by Robert Cook, Esq.

c. England. Presented by Edwin Shepherd, Esq.

d—f. England. From Mr. Stephens' collection.

g—i. Europe. From M. Becker's collection.

## 2. EPIONE APICIARIA.

*Flavescens ; alæ ochraceo transverse strigatæ, lineæ nigricante sub-undulata extus purpurascens-cinereo diffuse marginata, puncto discali nigro ; antica linea interiore nigricante valde angulata.*

———, *DeVill. Ent. Linn.* ii. 303, 423, pl. 6, f. 3.

*Geometra apiciaria*, *Wien. Verz.* 104, 14. *Schr. Faun. Boic.* ii. 2, 17, 1634. *Ill. N. Ausg. dess.* i. 411, 14. *Bork. Eur. Schm.* v. 134—54. *Esp. Schm.* v. 82, pl. 15, f. 3. *Götz. Ent. Beytr.* iii. 3, 395, 139. *Hüb. Geom.* pl. 9, f. 47. *Haw. Lep. Brit.* 295.

*Geometra vespertaria*, *Donov. Brit. Ins.* vii. pl. 233, f. 3.

*Enchlæna apiciaria*, *Hüb. Verz. Schm.* 293, 2842.

*Ennomos apiciaria*, *Treit. Schm.* vi. 1, 34, 16. *Boisd. Ind.* 183, 1442.

*Epione apiciaria*, *Frey. Beitr.* pl. 102. *Dup. Lép.* iv. 213. pl. 148, f. 1. *Steph. Ill. Brit. Haust.* iii. 203, 1. *Herr.-Sch. Eur. Schm.* iii. 49, 128. *Guen. Phal.* i. 96, 143.

—k. England. From Mr. Stephens' collection.

—o. England.

—t. Europe. From M. Becker's collection.

## 3. EPIONE ADVENARIA.

*Albido-cinereascens, subtus lutescente suffusa ; alæ ferrugineo suffusa, lineæ undulata ferruginea, lineæ exteriori diffusa indistincta, puncto discali nigricante, fimbria fusco notata ; antica linea interiore subarcuata.*

*Geometra advenaria*, *Hüb. Beitr.* ii, pl. 3, f. Q ; *Geom.* pl. 9, f. 45. *Esp. Schm.* vi, 86, pl. 16, f. 1—3. *Bork. Eur. Schm.* v. 137, 56. *Haw. Lep. Brit.* 296.

*Cepphis advenaria*, *Hüb. Verz. Schm.* 294, 2846.

*Ennomos advenaria*, *Treit. Schm.* vi. 1, 36, 17. *Frey. Beitr.* pl. 120.

*Epione advenaria*, *Dup. Lép.* iv. 219, pl. 150, f. 3. *Steph. Ill. Brit. Haust.* iii. 204, 3. *Herr.-Sch. Eur. Schm.* iii. 49, 126. *Guen. Phal.* i. 97, 146.

—f. England. From Mr. Stephens' collection.

*g, h.* England. From Mr. Stevens' collection.

*i—k.* England.

*l, m.* Europe. From M. Becker's collection.

#### 4. EPIONE ACUMINARIA.

*E. apiciariæ affinis, duplo major; alæ magis oblongæ; antice apice acutiores.*

*Epione acuminaria, Eversm. Bull. Soc. Imp. Mosc. 1851, Guen. Phal. i. 97, 144.*

Region of Noor-Saisan Lake.

#### North America.

##### A. Alæ flavæ.

A. Alæ anticæ fimbria non notata. - serinaria, Herr.-Sch.

B. Alæ anticæ fimbria notata.

A. Alæ anticæ linea la recta. - Calipusaria, Walz

B. Alæ anticæ linea la non recta. - Agyllaria, Walz

B. Alæ cervinæ. - pustularia, Herr.-Sch.

#### 5. EPIONE SERINARIA.

*Flava; alæ anticæ, basi lutescentes, linea exteriori obliqua la subrecta ferruginea, linea interiori angulata indistincta, plagi apud angulum interiorem rosea, margine exteriori flexo et excavato; posticæ cinereo-albidæ, striga apud marginem interiorem fusca.*

*Plagodes serinaria, Herr.-Sch. Schm. Exot. f. 365.*

*Epione serinaria, Guen. Phal. i. 98, 149.*

*a.* Orilla, West Canada. From Mr. Bush's collection.

#### 6. EPIONE CALIPUSARIA.

*Mas. Late flava; alæ anticæ linea obliqua ferruginea viz una lata costam versus nigra, linea interiori ochracea recta obliqua antice abbreviata, spatio marginali postico rufescente-cervino fimbria alba fusco notata, margine exteriori flexo antice et excavato, costa ochraceo guttata; posticæ flavescendo-alba, striga postica nebulaque posteriore rufescentibus.*



**Male.** Bright yellow, paler beneath. Antennae pectinated nearly to their tips. Fore wings with a ferruginous oblique hardly undulating line, which is black, and is preceded by a black mark on the costa; an interior straight oblique ochraceous line, which does not extend to the costa, the latter having some ochraceous dots between the line and the base; space beyond the second line reddish fawn-colour, except in front; fringe white, with brown marks opposite the veins; exterior border bent, slightly excavated in front. Hind wings yellowish white, with a reddish streak extending from the interior border to the disk, and having a slight reddish tinge between it and the hind part of the exterior border, which is bent. Length of the body 6 lines; of the wings 15 lines.

a. Orilla, West Canada. From Mr. Bush's collection.

#### 7. EPIONE AGYLLARIA.

**Mas.** *Luteo-flava; abdomen subtus ochraceum; pedes cinereo variis; alæ puncto discali nigro; antica cinereo-fusca, lineis duabus obliquis vix undulatis obscure cinereis, 2a extus glauco marginata apud costam nigra, spatio exteriori posteriore cervino, fimbria nigro notata, costa purpurascente-cinereo varia; postica pallide flava, linea undulata purpurascente-fusca, spatio exteriori postico purpurascente-cervino suffuso.*

**Male.** Luteous-yellow. Abdomen ochraceous beneath. Legs partly cinereous. Wings with a black discal point. Fore wings speckled with cinereous-brown; two oblique hardly undulating dark cinereous lines; second line bordered with glaucous on the outer side, black on the costa; space beyond it, except in front, with a fawn-coloured tinge and more largely speckled than the wing elsewhere; fringe with black marks opposite the veins; costa with purplish brown marks, wholly of that hue towards the base. Hind wings pale yellow, with a purplish brown undulating line; exterior space, except in front, indistinctly speckled, and with a slight purplish fawn-coloured tinge. *Var. β.*—Fore wings with the interior line represented by three dots. Length of the body 6 lines; of the wings 16 lines.

It is extremely near allied to *E. Calipusaria*, and both may be local varieties of one species, or may have a common origin. The chief distinction is the straight and less oblique interior line on the fore wings of *E. Calipusaria*, which seems to connect *E. serinaria*

with *E. Agyllaria*, though *E. serinaria* is a more isolated species than either of the others.

*a, b.* St. Martin's Falls, Albany River, Hudson's Bay. Presented by Dr. Barnston.

### 8. EPIONE PUSTULARIA.

*Mas. Luteo-cervina ; alæ nigro conspersæ, lineis duabus arcuatis incompletis nigris, la intus fusco marginata, margine lato fusco ; anticæ linea interiore undulata nigra, gutta subapicali alba, margine exteriori convexo non flexo ; posticæ margine exteriori angulato.*

*Hypagetis pustularia* (*Geometra ampla*, *Eutrapela moderata*), *Hübner. Samml. Exot. Schm.* i. 20, 52, f. 103, 104.

*a.* Georgia, Florida. Presented by E. Doubleday, Esq.

### South Africa.

#### A. Alæ flavescentes.

A. Alæ subhyalinæ. - - - transversaria, *Guen.*

▲ Alæ lineis arcuatis, - - - cambogiaria, *Guen.*

#### B. Alæ lineis rectis.

a. Alæ posticæ unilineatæ. - - - biviaria, *Guen.*

b. Alæ posticæ non lineatæ. - - - paucaria, *Guen.*

#### B. Alæ non flavescentes.

A. Alæ posticæ non lineatæ. - - - antennaria, *Guen.*

B. Alæ posticæ lineatæ. - - - Brongusaria, *Walk.*

### 9. EPIONE TRANSVERSARIA.

*Fœm. Flavescens ; antennæ pectinatæ ; alæ subhyalinæ, iridescentes, substrigatæ, linea bisinuata rufo-fusca, puncto discali margineque lato carneo-cinereis.*

*Epione transversaria*, *Guen. Phal.* i. 98, 147.

South Africa.

### 10. EPIONE CAMBOGIARIA.

*Flavescens ; alæ anticæ ferrugineo conspersæ, linea angulosa fusca, spatio exteriori (apice excepto) purpurascens, linea interiore e maculis duabus purpurascens, margine exteriori flexo non*

*excavato ; posticæ albido-cinereæ, linea purpurascens antice obsoleta, spatio posteriore purpurascens strigato et nebuloso, fimbria apud angulum interiorem nigricante.*

*Epione cambogiaria*, Guen. *Phal.* i. 98, 148.

This species much resembles *E. Calipusaria* in structure, colour and markings.

♂, ♀. South Africa. From M. Becker's collection.

#### 11. EPIONE BIVIARIA.

*Ma.* *Sulphurea, subtus pallidior sordidior ; pedes violaceo-rufi ; alæ atomis saturatioribus ; anticæ lineis duabus obliquis rectis parallelis cinereis ; posticæ linea unica.*

*Epione biviaria* Guen. *Phal.* i. 99, 150.

Cape.

#### 12. EPIONE PAUCARIA.

*Ma.* *Sulphurea ; antennæ valde pectinatæ ; alæ anticæ lineis duabus vix conspicuis, subtus rufescente tinctæ ; posticæ sub-rufescente-albidæ, lineis nullis, angulo interiore flavo.*

*Epione paucaria*, Guen. *Phal.* i. 99, 151.

South Africa.

#### 13. EPIONE ANTENNARIA.

*Ma.* *Fulva ; antennæ latissime pectinatæ, fere plumosæ ; alæ antice, lateritio valde conspersæ, puncto discali lineisque obliquis rectis parallelis violaceo-fuscis ; posticæ sordide carneæ, lineis nullis.*

*Epione antennaria*, Guen. *Phal.* i. 99, 152.

South Africa.

#### 14. EPIONE? BRONGUSARIA.

*Fœm.* *Pallide cinerea, fusco conspersa, subtus flavescens tincta ; caput et thorax antice fusca ; alæ fusco trilineatæ, puncto discali lunulisque marginalibus nigris, fimbria interlineata, margine exteriori convexo integro ; anticæ linea 1a flexa, 2a fere recta, 3a antice angulata, guttis maculaque postica exterioribus nigris ; posticæ subdentatæ, lineis 1a et 2a subobsoletis, 3a duplicata subarcuata.*

*Female.* Pale cinereous, speckled with brown, with a yellowish tinge beneath. Head and fore part of the thorax mostly brown. Wings with three brown lines; discal point and marginal lunule black; fringe interlined; exterior border convex, not bent nor excavated. Fore wings with the first line bent; second more straight, ending in a costal spot; third forming an angle in front, accompanied on its outer side by black dots, of which the largest is near the interior angle. Hind wings slightly scalloped; first and second lines nearly obsolete; third double, slightly curved. Under side of the four wings with a ferruginous exterior band, which in the fore wings is dilated to the exterior border. Length of the body 5 lines; of the wings 12 lines.

a. South Africa. Presented by Sir A. Smith.

### Australia.

#### 15. EPIONE INCARIA.

*Fœm.* *Sordide fulvescens; alæ strigatæ, margine lato violaceo cinereo; anticæ linea recta, spatio apicali fulvescente, umbra interiore rotundata; posticæ linea subflexuosa.*

*Epione incaria, Guen. Phal. i. 97, 145.*

Tasmania.

#### Genus 15. HYPERYTHRA.

Corpus robustum. Fasciculus frontalis productus, acutus. Palpi porrecti, caput sat superantes; articulus 2us crassus; 3us linearis, apice conicus, 2i dimidio longior. Pedes elongati, sat graciles; tibiæ posticæ longissimæ, calcaribus longis. Alæ latiusculæ; anticæ acutæ, non falcatæ, margine exteriori integro non flexo; posticæ margine exteriori dentato. *Mas.*—Antennæ pectinatæ, apice filiformes. Alæ posticæ costa dilatata, fasciculo penicillatæ ornata.

*Pseudopanthera, p., Hubn. Verz. Schm. 295.*

*Hyperythra, Guen. Phal. i. 99.*

Body stout. Frontal tuft prominent, acute. Proboscis stout, moderately long. Palpi porrect, extending rather far beyond the head; second joint thick; third linear, conical at the tip, more than half the length of the second. Legs very long, rather slender; hind tibiæ much longer than the hind femora; spurs long. Wings generally rather broad. Fore wings acute, not falcate; exterior border entire, not angular nor bent. Hind wings with the exterior

border more or less dentate. *Male*.—Antennæ pectinated to more than three-fourths of the length, filiform from thence to the tips. Hind wings of *H. limbolaria* with the costa dilated and adorned with a tuft of black plumes. *Female*.—Antennæ setaceous.

## West Indies.

### 1. *HYPERYTHRA VERSATILIARIA*.

*Var.?* *Fœm.* *Læte lutea* ; caput, thoracis latera antica pedesque purpureo-rosea ; alæ nigro vix conspersæ, lineis duabus ochraceis valde indistinctis, exteriorè extus maculis nigris marginata, fimbria purpurascens-rosea, costa nigro punctata ferrugineo trimaculata, spatio marginali subtus nonnunquam purpurascens. *Var. β.*—Alæ supra pallidissime carneæ, olivaceo vix tinctæ ; anticæ costa olivaceo-viridi, linea interiorè arcuata.

*Hyperythra versatiliaria*, Guen. *Phal.* i. 102, 155.

*Var.?* *Female*. Bright luteous, brighter beneath. Head, palpi, sides of the thorax in front and legs purplish rosy. Wings very slightly speckled with black ; two ochraceous very indistinct lines, the exterior one having along its outer side a few irregular black spots ; fringe purplish rosy, luteous at the base. Fore wings with black points on the costa, along which there are three ferruginous spots ; under side with the space beyond the second line mostly purplish, this hue sometimes obsolete. Hind wings beneath with the exterior space partly purplish in front. *Var. β.*—Wings above very pale flesh-colour, with a very slight olive-green hue, which is more distinct along the costa of the fore wings ; the latter with an interior curved line. Length of the body 6 lines ; of the wings 16 lines.

—f. St. Domingo. From Mr. Tweedie's collection.

g. Honduras. From Mr. Dyson's collection.

### 2. *HYPERYTHRA? AMYTISARIA*.

*Fœm.* *Pallide ochracea*, subtus læte ochracea ; palpi caput non superantes ; alæ nigro subconsersæ, fusco subnebulosæ, linea exteriorè nigricante albido interlineata subangulosa, spatio exteriorè purpurascens-cinereo ; puncto discali nigro ; anticæ fascia interiorè nigricante antice flexo, margine exteriorè vix excavato ; posticæ margine exteriorè valde convexo.

*Female*. Dull pale ochraceous, much brighter beneath. Palpi

not extending beyond the frontal tuft. Wings slightly and partly clouded with brown, speckled with black; exterior line blackish, whitish-interlined, slightly zigzag; space beyond mostly clouded with dark purplish cinereous; a black discal point. Fore wings with an interior blackish whitish-interlined band, which is bent in front; exterior border hardly excavated in front. Hind wings with the exterior border very convex. Length of the body  $4\frac{1}{2}$  lines; of the wings 12 lines.

The palpi and wings of this species differ much from those of the typical form of the genus. The two following species also recede from the normal structure.

a. Jamaica. From Mr. Gosse's collection.

### South America.

#### 3. HYPERYTHRA? OROCEATA.

*Ochraceo-ferruginea; alæ anticæ fascia exteriori maculari fasciæque submarginali postice abbreviata nigris; posticæ fascia discali nigra.*

*Phalæna-Geometra croceata*, Cram. Pap. Exot. iv. 137, pl. 360, f. F.

*Pseudopanthera crocearia*, Hubn. Verz. Schm. 295, 2856.

Surinam.

#### 4. HYPERYTHRA SYCTARIA.

*Fœm. Læte flava; palpi caput paullo superantes, articulo 3o parvo; alæ ochraceo dense conspersæ, linea exteriori ochracea recta obliqua incompleta, linea submarginali e punctis elongatis; anticæ linea puncta alba nigro notata includente maculisque duabus albis nigro marginatis terminata, linea interiori ochracea indistincta, margine exteriori subconvexo; posticæ margine exteriori subflexo.*

*Female.* Bright yellow, paler beneath. Palpi extending a little beyond the head; third joint minute, conical. Wings thickly speckled with bright ochraceous, which hue forms a straight oblique incomplete exterior line; a submarginal line composed of elongated black points on the veins. Fore wings with the line containing some white black-marked points, and ending on each border in a white black-bordered spot; an interior indistinct ochraceous line; exterior border slightly convex. Hind wings with the exterior border slightly bent. Length of the body 6—7 lines; of the wings 18—20 lines.

a, b. Venezuela. From Mr. Dyson's collection.

5. *HYPERYTHRA* *MASCULARIA*.

*Mas.* *Olivaceo-cinerea, subtus flavescens; fasciculus frontalis vinoso-cinereus; alæ fusco conspersæ, linea concisa saturate vinoso-cinerea extus diffuse marginatæ; posticæ linea arcuata non flexuosa, linea interiore vaga indistincta.*

*Hyperythra muscularia, Guen. Phal. i. 103, 156.*

*Cayenne.*

## South Africa.

6. *HYPERYTHRA*? *HATURATA*.

*Mas.* *Luteo-flava; caput album; palpi breves, declives; antennæ late pectinatæ, apices versus nudæ; alæ purpurascente subconspersæ; anticæ acutæ, macula discali exteriori maculaque apicali purpurascentibus, margine exteriori convexo non excavato; posticæ margine exteriori integro.*

*Male.* Luteous-yellow. Head white. Palpi short, declining, not extending beyond the head. Antennæ rather broadly pectinated to two-thirds of the length. Wings slightly and transversely speckled with purplish. Fore wings acute, with a purplish spot on the exterior part of the disk, and with a purplish apical spot; exterior border slightly convex, not excavated. Hind wings with the exterior border entire; interior angle prominent. Length of the body 5 lines; of the wings 14 lines.

*a. Port Natal. From M. Guesinzus' collection.*

## Hindostan.

A. *Alæ posticæ dentatæ.*

A. *Alæ non cinereæ.* - - - - *limbolaria, Guen.*

B. *Alæ cinereæ.* - - - - *ennomaria, Guen.*

B. *Alæ posticæ non dentatæ.* - - - - *Niguzaria, Walk.*

C. *Alæ posticæ integræ.*

A. *Alæ anticæ acutæ.* - - - - *Riobearia, Walk.*

B. *Alæ anticæ vix acutæ.* - - - - *Aristonaria, Walk.*

7. *HYPERYTHRA* *LIMBOLARIA*.

*Mas.* *Luteo-flava; alæ fascia exteriori rufescente, nonnunquam ochracea, aut cervina, aut rufescentes, fasciis duabus cinereo-*

*rufis ; frons albo marginata ; pedes antici nigro cincti. Fœm.*  
*—Luteo-flava aut testacea ; alæ anticæ lineis tribus parallelis ;*  
*posticæ lineis duabus, macula exteriore nigra.*

Phalæna-Geometra lutea, *Cram. Pap. Exot.* iv. 167, pl. 370, f. C, D.

Phalæna flavata? *Fabr. Mant. Ins.* ii. 187, 32; *Ent. Syst.* iii. 2, 169, 145.

Phalæna-Geometra flavaria? *Gmel. ed. Syst. Nat.* i. 5, 2460, 659.

Hyperythra limbolaria, *Guen. Phal.* i. 101, 153, pl. 3, f. 3, 4.

Java.

Var.? *Mas. Flava ; alæ carneo sordido confertissime suffusæ, lineis maculisque tectis, fimbria apicali alba basi rufa ; posticæ costa late albida. Var. β.—Alæ minus strigatæ, fascia lata submarginali maculari umbræque media lateritiis.*

✓ Hyperythra penicillaria, *Guen. Phal.* i. 101, 154.

Bengal.

The male of this species varies in hue from luteous-yellow, with transverse speckles and with an exterior reddish band, to ochraceous or fawn-colour, or reddish with one or two dull cinereous-red bands. The under side is always bright luteous, with an exterior band in both sexes. The female is luteous-yellow or testaceous, and the fore wings have three parallel lines, two of which are continued on the hind wings ; the latter have a black spot in front beyond the third line ; this spot is less distinct in the male.

a. Port Natal. From M. Gueinzus' collection.

b. Ceylon. Presented by R. Templeton, Esq.

d, e. Punjaub. Presented by General Hearsay.

f—i. Silhet. From the Rev. J. Stainforth's collection.

j, k. Silhet. From Mr. Stainforth's collection.

l—p. North Hindostan. From Mr. Stevens' collection.

q, r. North Hindostan. From the Entomological Society's collection.

s. North Hindostan. From Mr. James' collection.

t, v. Hindostan. From Archdeacon Clerk's collection.

u, aa. China. Presented by G. T. Laye, Esq.

bb. ———? Presented by E. Doubleday, Esq.

cc—ee. ———? From Mr. Milne's collection.

ff. ———?



8. *HYPERYTHRA ENNOMARIA*.

**Mas.** *Carneo-cinerea ; fasciculus frontalis albo lineatus ; pedes albo vinoso nigroque marmorati ; alæ velutinæ, lineis nullis ; antica margine exteriori subrecto, fimbria nigro notata apice albo tincta ; postica dentatæ, nigro unimaculatæ, costâ fasciculatâ.*

*Hyperythra ennomaria*, Guen. *Phal.* i. 103, 157.

*H. limbolaria*, var. ?

Bengal.

9. *HYPERYTHRA ? NIGUZARIA*.

**Mas.** *Testacea ; palpi caput superantes ; antennæ usque ad apices pectinatæ ; alæ fusco transverse subconspersæ, fascia exteriori fusca informi incompleta ; antica acutæ, linea interiori diffusa arcuata fusca, litura discali transversa nigricante-fusca, margine exteriori vix convexo non excavato ; postica vix dentatæ.*

**Male.** Testaceous. Frontal tuft rather prominent. Palpi extending beyond the head. Antennæ moderately pectinated to their tips. Wings transversely and slightly speckled with brown, with an irregular and incomplete exterior brown band. Fore wings acute, with an interior diffuse curved brown line ; discal mark transverse, blackish brown ; exterior border hardly convex, not excavated. Hind wings very slightly scalloped ; under side with a discal brown point. Length of the body 8 lines ; of the wings 20 lines.

**a. Silhet.** From Mr. Sowerby's collection.

10. *HYPERYTHRA ? RIOBEARIA*.

**Mas.** *Ochracea ; palpi porrecti, caput sat superantes, articulo 2o longo robusto, 3o conico parvo ; antennæ late pectinatæ ; alæ fuscescente conspersæ, lineis duabus subrectis, 1a saturate ochracea, 2a fuscescente diffusa cinereo notata ; antica acutæ, puncto discali nigricante, margine exteriori convexo non excavato ; postica margine exteriori integro.*

**Male.** Ochraceous. Palpi porrect, extending some distance beyond the head ; second joint long, stout ; third joint conical, much less than half the length of the second. Antennæ broadly

pectinated. Wings transversely speckled with brownish, with two nearly straight lines; interior line deep ochraceous; exterior line brownish, diffuse, cinereous-marked. Fore wings acute; a blackish discal point; exterior border convex, not excavated. Hind wing with the exterior border entire. Length of the body 7 lines; of the wings 18 lines.

a. Nepaul. Presented by Major-General Hardwicke.

### 11. *HYPERYTHRA? ARISTONARIA*.

Mas. *Luteo-flava*; caput, palpi et thorax anticus fuscescenti-rufa; fasciculus frontalis productus; palpi caput superantes; antennæ latissime pectinatæ, apice nudæ; alæ fusco conspersæ, lineis duabus diffusis purpurascente-rufis, 1a arcuata, 2a recta; anticæ annulo discali elongato purpurascente-rufo, costa convexa fusco punctata, margine exteriori recto non excavato; posticæ margine exteriori integro.

*Male*. Luteous-yellow, brighter beneath. Head, palpi above and fore border of the thorax brownish red. Frontal tuft prominent. Palpi extending beyond the head; third joint minute. Antennæ very broadly pectinated along five-sixths of the length; branches pubescent. Legs thickly speckled with purplish red. Wings slightly and transversely speckled with brown, adorned with two diffuse purplish red lines; interior line curved; exterior line straight, ending in an apical spot of the same hue; under side more speckled, and with the lines brighter and more distinct. Fore wings with an elongated discal purplish red ringlet; costa convex, brown-pointed; tips hardly acute; exterior border straight, not excavated. Hind wings with the exterior border entire. Length of the body 6 lines; of the wings 12 lines.

a. North China. From Mr. Fortune's collection.

### Australasia.

### 12. *HYPERYTHRA JUVENTINARIA*.

Fœm. *Pallide ochraceo-flava*; alæ dentatæ, subtus sordide cinereæ violaceo-nigro strigatæ, linea concisa transversa saturate rufa albo sericeo marginata, spatio exteriori fuscescente, margine exteriori rufescente nigro lineata, fimbria alba fuscescente conspurcata.

*Hyperythra juveninaria*, *Guen. Phal.* i. 103, 158.

*Bom. co.*

Country unknown.

### 13. *HYPERYTHRA ÆSYMNUSARIA*.

**Fœm.** *Obscure ochracea, vix cinerascens, subtus læte ochracea; palpi validi, angulati, caput perparum superantes; alæ nigro subconspersæ, lineis media et exteriori rufescentibus angulosis diffusis indistinctis, hac nigricante subconspersa, spatio marginali subrufescente, linea exteriori subtus nigricante bene determinata; anticæ valde acutæ, lituris costalibus unaque apud angulum interiorem nigricantibus.*

**Female.** Dull ochraceous, with a slight cinereous tinge, bright ochraceous on the under side. Palpi stout, angular, extending very little beyond the head. Wings slightly and very minutely black-speckled; middle and exterior lines reddish, diffuse, indistinct, zigzag, the latter slightly blackish-marked; marginal space slightly reddish-tinged; under side with the exterior line mostly black and distinct. Fore wings very acute, with some blackish marks along the costa and one near the interior angle. Length of the body 6—7 lines; of the wings 18—20 lines.

♂ ——— ? From Mr. Milne's collection.

♀ ——— ?

### 14. *HYPERYTHRA ARCASARIA*.

**Fœm.** *Læte lutea; caput cinereo-rufescens; palpi robusti, oblique ascendentes; alæ rufescente subconspersæ, puncto discali nigro, linea exteriori rufa undulosa; anticæ acutæ, linea interiori undulosa, linea exteriori apud costam angulata, plaga costali subapicali albida, spatio marginali rufescente puncta albida elongata includente; posticæ marginis exterioris angulo subcaudiformi.*

**Female.** Bright luteous. Head and fore border of the thorax cinereous-reddish. Palpi stout, obliquely ascending. Wings very lightly reddish-speckled; discal point black; exterior line red, with numerous slight undulations. Fore wings acute; interior line like the exterior one, which forms an acute angle near the costa, where it is surmounted by a whitish patch; space beyond the line

h, including a row of elongated whitish points; angle of the exterior border very distinct. Hind wings with the margin at of the fore wings, except towards the exterior line reddish-streaked luteous; angle of the exterior border brown. Length of the body 6 lines; of the wings 17 lines.  
—? Presented by E. Doubleday, Esq.

15. *HYPERYTHRA MINASARIA*.

*♂*. *Sordide ochracea, subtus lutea; frons producta; palpi robusti, subangulati, caput superantes; alae amplae, fusco conspersae, linea interiore fuscescente subundulata, lineae superiore nigricante rufescente extus diffuse marginatae, paucis adhuc exterioribus cinereis nigro notatis; angulus acutus, margine exteriori convexo non flexo, fimbria sub alba; postica margine exteriori vix flexo.*

*♀*. Dull ochraceous, luteous beneath. Front produced, stout, slightly angular, extending beyond the head.

Palpi thickly and transversely brown-speckled; interior line blackish, slightly undulating; exterior line blackish, double-bordered on the outer side, near which there are a few black-marked dots; under side with a distinct point. Angulus hardly acute; exterior border convex, not bent; fringe black to the tip. Hind wings with the exterior border hardly bent. Length of the body 7 lines; of the wings 18 lines.

—? From Mr. Milne's collection.

16. *HYPERYTHRA CALORARIA*.

*♂*. *Saturata ferruginea, subtus lutea rufo varia; palpi oblique ascendentes, non angulati, articulo 3o per se fusco substrigato, luteo varia, macula subcostali fasciata, latiore lata perobliqua antice dilatata luteis, lineae exteriori denticulata alba, guttis duabus submarginatis obscuris, margine exteriori perobliquo; postica margine exteriori subangulato.*

*♀*. Deep ferruginous-red, bright luteous and variegated beneath. Palpi short, hardly stout, obliquely ascending; third joint conical, minute. Wings transverse

indistinctly streaked with brown, varied with luteous between the base, and a broad very oblique luteous band, which is dilated towards the costa, and is concisely bordered on the outer side by a white denticulated line; two deeper coloured spots in each wing beyond the line. Fore wings with a luteous subcostal spot near the inner border of the band; exterior border much more oblique than is the typical species of the genus. Hind wings with the exterior border slightly angular. Length of the body 6 lines; of the wings 16 lines.

α. ———? Presented by E. Doubleday, Esq.

### Genus 16. SICYA.

Corpus gracile. Frons rotundata, non producta. Palpi breves, perfecti, caput vix superantes, articulus 3us minimus. Antennæ maris pectinatæ, apice nudæ. Tibiæ posticæ subincrassatæ, calcari- bus parvis; alæ fimbria brevissima; anticæ longiusculæ, sub- falcatæ, margine exteriori valde flexo; posticæ margine exteriori subflexo.

*Sicya*, Guen. *Phal.* i. 104.

Body slender. Front rounded, not prominent. Palpi short, perfect, hardly extending beyond the head; third joint very minute. Antennæ of the male moderately pectinated, except towards their tips. Hind tibiæ slightly incrassated; spurs short. Wings moderately broad; fringe very short. Fore wings subfalcate, much longer than the hind wings; exterior border forming a prominent but much rounded angle at one-third of the length from the tips, very oblique from thence to the interior border. Hind wings with the exterior border bent; flexure rounded.

### North America.

#### 1. SICYA TRUNCATARIA.

*Max.* *Sulphureo-flava; alæ anticæ lineis duabus fuscis, 1a flexa, 2a recta valde obliqua antice saturatiore, spatio exteriori stri- gato rufescente-carneo antice flavo, fimbria alba fusco notata; posticæ pallidissime flavæ, linea brevi undulata postica nebu- laque marginali rufescentibus.*

*Sicya truncataria*, *Guen. Phal.* i. 104, 159.

Canada.

## 2. *SICYA SOLFATARIA*.

*Sulphureo-flava*; *frontis margines palpique rufi*; *alæ anticæ lineis duabus obliquis fuscescentibus*, 1a *recta*, 2a *antice subarcuata ad costam nigra*, *puncto basali punctoque discali fuscis*, *costa plus minusve rufescente*, *spatio marginali rufescente antice flava*; *posticæ flavescente-albidæ*, *linea arcuata antice obsoleta*, *spatio marginali subrufescente*.

*Sicya solfataria*, *Guen. Phal.* i. 104, 160.

Canada.

a. Trenton Falls, New York. Presented by E. Doubleday, Esq.

## 3. *SICYA MACULARIA*.

*Fœm. S. solfataricæ similis, major*; *alæ anticæ linea 1a maculari arcuata*, 2a *flexuosa*, *spatio exteriori postico rufescente conciso*, *fimbria non notata*; *posticæ margine exteriori postico subexciso*.

*Geometra macularia*, *Harris, Ins. Lake Sup.* 392, pl. 7, f. 3.

*Sicya sublimaria*, *Guen. Phal.* i. 105, 161.

Canada.

## Mexico.

## 4. *SICYA? VIMINARIA*.

*Fusco-viridis, subtus lutea*; *alæ lineis duabus fuscis*, 2a *albido notata*; *anticæ linea basali, striga discali lituraque costali exteriori albo marginata fuscis*, *fascia subtus latissima marginali postice abbreviata purpurascens*; *posticæ linea 2a vaga*.

*Cratoptera viminaria*, *Herr.-Sch. Lep. Exot.* 44, f. 313, 314.

Mexico.

## South America.

5. *SIOYA DIRECTARIA*.

*Mas.* *Luteo-flava*; *alæ anticae vix falcatae, viridescente tinctæ, lineis duabus rectis albis extus olivaceo-flavo marginatis, spatio postico roseo-carneo, puncto discali nigro*; *posticæ sordide carneæ, litura apud angulum anteriorem nigricante strigis marginata.*

*Sioya directaria, Guen. Phal. i. 105, 162.*

Colombia.

Genus 17. *HETEROLOCHA*.

*Statura gracilis. Frons rotundata. Palpi graciles, rostri-formes aut incumbentes, frontem superantes. Tibiæ non incrassatæ. Alæ flavæ, maculis ferrugineis; fimbria brevis, concolor; anticæ acutæ, margine exteriori sæpe angulato; posticæ margine exteriori flexo aut angulato, non inciso. Mas. — Antennæ longe pectinatæ, apice filiformes. Fæm. — Abdomen crassum, carinatum, apice acutum.*

*Heterolocha, Lederer, V. Z. B. W. iii. 207. Guen. Phal. i. 105.*

*Metrocampa, p., Herr.-Sch.*

Body slender. Front rounded. Palpi slender, rostriform or incumbent, extending beyond the front. Antennæ of the male with long slender branches. Abdomen of the female thick, keeled, acute. Hind tibiæ not incrassated. Wings yellow, with ferruginous spots, of which the largest is apical; fringe short. Fore wings acute; exterior border often angular. Hind wings with the exterior border bent or angular, not notched.

## South America.

1. *HETEROLOCHA RUMIARIA*.

*Fæm. Late flava; alæ atomis obscurioribus, linea maculari ferruginea albido punctata; anticæ linea interiore subarcuata, linea exteriori maculis duabus magnis marginalibus terminata apud costam nigricante angulata.*

*Heterolocha rumiaria, Guen. Phal. i. 107, 166.*

Quito.

## 2. HETEROLOCHA APRICARIA.

*Flava; alæ nigro conspersa, ochraceo transverse strigatæ, linea exteriori rufescente subdentata, punctis submarginalibus punctoque discali nigris, margine exteriori subflexo; anticæ subfalcatæ, linea interiori subdentata rufescente.*

*Metrocampa apricaria, Herr.-Sch. Lep. Exot. pl. 64, f. 363.*

*Heterolocha apricaria, Guen. Phal. i. 108, 168.*

Venezuela.

## Africa.

## 3. HETEROLOCHA FLAVEDINARIA.

*Mas. Flava; antennæ valde pectinatæ; alæ puncto discali fusco; anticæ macula costali subapicali violaceo-fusca, macula magna quadrata punctoque apud angulum interiorem, linea interiori apud costam conspicua; posticæ rotundatæ, linea antice abbreviata atomisque posterioribus.*

*Heterolocha flavedinaria, Guen. Phal. i. 106, 163.*

Abyssinia.

## 4. HETEROLOCHA XANTHIARIA.

*Fœm. Pallide lutescens; alæ linea exteriori obliqua subrecta rufescente antice obsoleta postice extus diffuse marginata, margine exteriori angulato; anticæ linea interiori recta non obliqua, plaga costali apicali rufa nigro submarginata, posticæ spatio interiori pallidiore.*

*Heterolocha xanthiaria, Guen. Phal. i. 106, 164, pl. 11, f. 1.*

Abyssinia.

## Asia Minor.

## 5. HETEROLOCHA LAMINARIA.

*Mas et fœm. Sordide ochracea; alæ violaceo-fusco conspersæ, fascia fusco-cinerea; anticæ acutæ, fascia recta obliqua, linea interiori fracta, macula discali maxima, macula apicali violaceo-fusca, costa late flavo suffusa; posticæ macula discali minore.*



*Heterolocha laminaria*, *Herr.-Sch. Eur. Schm. Sup.* 71, f. 489, 490. *Guen. Phal.* i. 107, 167.

Asia Minor.

Country unknown.

#### 6. HETEROLOCHA THISOARIA.

*Form.* *Flavescente-flava*; *palpi apice violaceo-nigri*; *alæ atomis nonnullis rufescentibus*; *antica falcata*, *macula costali apicali carneo-ferruginea fusco marginata*, *maculis duabus posticis semilunatis ferrugineis*; *posticæ lineis duabus indeterminatis atomariis*, *la arcuata pallido punctata*.

*Heterolocha Thisoaria*, *Guen. Phal.* i. 106, 165.

### Genus 18. RUMIA.

*Corpus gracile.* *Frons rotundata*, non prominens. *Proboscis gracilis.* *Palpi porrecti*, breves, *caput non superantes*; *articulus 3us minimus.* *Antennæ simplices.* *Tibiæ posticæ non incrassatæ*, *calcaribus parvis.* *Alæ late flavæ*, *velutinæ*, *integræ*, *concolores*; *antica vix acutæ*, *marginē exteriorē non flexo*; *posticæ marginē exteriorē vix flexo.*

*Opisthograptis*, *Hübner. Verz. Schum.* 292; *Steph.*

*Enomos*, p. *Treit.*

*Ramia*, *Dup. Léop.* iv. 117; *Boisd.*; *Herr.-Sch.*; *Leder. V. Z. B. W.* iii. 207; *Guen. Phal.* i. 108; *Staint.* ii. 9.

*Body slender.* *Front rounded*, not prominent. *Proboscis slender.* *Palpi porrect*, short, not extending beyond the head; third joint extremely minute. *Antennæ simple* in both sexes. *Hind tibiae not incrassated*; *spurs short.* *Wings bright yellow*, *velvety*, entire, alike in colour. *Fore wings hardly acute*; *exterior border not bent.* *Hind wings with the exterior border hardly bent.*

### Europe.

#### 1. RUMIA CRATÆGATA.

*Late flava*; *caput antice*, *palpi thoracisque latera antica rufa*; *alæ litura discali nivea fusco marginata*, *lineis duabus exterioribus denticulatis indistinctis*, *fimbria rufescente punctato*; *antica maculis costalibus rufescentibus.*

- , *Albin. Ins.* pl. 40, f. 65; pl. 46, f. 76, 77; pl. 95, f. a. *Geoff. Ins.* ii. 139. *Wilkes, Pap.* 39, pl. 1, f. 4. *Uddm. Diss.* 70. *Sepp. Ins.* vi. 25, pl. 6.
- Phalæna-Geometra Cratægata*, *Linn. Syst. Nat.* i. 2, 868; *Faun. Suec.* 1283. *Gmel. ed. Syst. Nat.* i. 5, 2472, 243.
- Phalæna Cratægata*, *Fabr. Sp. Ins.* ii. 259, 98; *Mant. Ins.* ii. 201, 143; *Ent. Syst.* iii. 2, 178, 176. *Scop. Ent. Carn.* 224, 556. *Schr. Faun. Boic.* ii. 2, 17, 1633. *Lang. Verz.* ii. 170, 1194. *Knoch, Beytr.* iii. 1, pl. 1, f. 1—9. *Müll. Zool. Dan. Prodr.* 126, 1459. *Brahm. Ins. Kal.* ii. 1, 459, 323. *Schwarz. Raup. Kal.* i. 318, 314; ii. 464, 478; 593, 616; 723, 795.
- Geometra Cratægata*, *Wien. Verz.* 104, 13. *Bork. Eur. Schm.* v. 130, 53. *Fuessl. Schw. Ins.* 40, 777. *Hübner. Geom.* pl. 6, f. 32. *Haw. Lep. Brit.* 298.
- Phalæna Inteolata*, *Berl. Mag.* iv. 5, 522, 37.
- Ennomos Cratægata*, *Treit. Schm.* vi. 1, 41, 19.
- Opisthograptis Cratægaria*, *Hübner. Verz. Schm.* 292, 2834.
- Rumia Cratægata*, *Dup. Léop.* iv. 119, pl. 141, f. 1. *Steph. Ill. Brit. Haust.* iii. 174. *Boisd. Ind.* 182, 1436. *Herr.-Sch. Eur. Schm.* iii. 55, 142. *Guen. Phal.* i. 109, 169. *Staint. Man.* ii. 9.
- a—r.* England. From Mr. Stephen's collection.
- s—w.* England.
- x—aa.* Europe. From M. Becker's collection.
- bb.* Italy. From Dr. Leach's collection.

## Hindustan.

### 2. RUMIA ABLUNATA.

*Sulphureo-flava; frons, palpi et pedes carneo-cinerascentes; alæ anticæ costa, litura discali lineisque duabus pallide carneo-cinereis, lineis approximatis subparallelis, 1a basi subarcuata, 2a recta; posticæ linea una subarcuata vix conspicua.*

*Rumia ablunata*, *Guen. Phal.* i. 110, 170.

Hindustan.

### Genus 19. CAUSTOLOMA.

Corpus gracile. Frons oblonga, antice angustior. Palpi trigoni, rostriformes, squamoso-hirsuti. Tibiæ posticæ non incrassatæ. Alæ flavæ, concolores, fusco maculatæ; anticæ valde acutæ, margine

exteriore antico excavato ; posticæ incisura bene determinata. *Mas.*—Antennæ late pectinatæ. Abdomen carinatum, apice quadratum. *Fem.*—Antennæ pectinatæ. Abdomen sat gracile, apice acutum.

*Ennomos*, p. *Treit.* ; *Boisd.*

*Therapis*, p. *Hübner. Verz. Schm.* 287 ; *Herr.-Sch.*

*Caustoloma*, *Leder. V. Z. B. W.* iii. 209 ; *Guen. Phal.* i. 110.

Body slender. Front oblong, obliquely straightened and prolonged between the palpi. Palpi triangular, rostriform, acute, squamous-hirsute. Hind tibiæ not incrassated. Wings yellow, alite in colour, with brown spots. Fore wings very acute, notched behind the tips. Hind wings with a deep excavation on the hind border. *Male.*—Antennæ broadly pectinated to the tips. Abdomen keeled, quadrate at the tip. *Female.*—Antennæ moderately pectinated. Abdomen hardly thicker than that of the male ; tip acute.

### 1. CAUSTOLOMA FLAVICARIA.

*Late-flava* ; alæ anticæ maculis quinque costalibus, striga apud marginis exterioris incisuram, lineis duabus guttaque exteriori violaceo-fuscis ; posticæ litura apud marginem interiorem, linea flexa pallidiori fimbriæque guttis.

*Geometra flavicaria*, *Wien. Verz.* 104, 12. *Ill. N. Ausg. dess.* i. 409, 12. *Esp. Schm.* v. pl. 50, f. 2. *Bork. Eur. Schm.* v. 128, 57. *Götz. Ent. Beytr.* iii. 3, 396, 138. *Hübner. Geom.* pl. 8, f. 40.

*Therapis flavicaria*, *Hübner. Verz. Schm.* 288, 2800.

*Ennomos flavicaria*, *Treit. Schm.* vi. 1, 30, 14. *Eversm. Faun. Volg.-Ural.* 359. *Boisd. Ind.* 182, 1441.

*Therapis flavicaria*, *Herr.-Sch. Eur. Schm.* iii. 50, 129.

*Caustoloma flavicaria*, *Lederer. Guen. Phal.* i. 111, 171.

Hungary. South Russia.

### Genus 20. VENILIA.

Corpus gracile. Caput parvum. Frons subproducta. Palpi breves, porrecti, caput paullo superantes ; articulus 3us minimus. Antennæ simplices, submoniliformes, subpubescentes. Abdomen subcarinatum. Pedes graciles, breviusculi ; tibiæ posticæ non incrassatæ, femoribus vix longiores, calcaribus longis. Alæ opacæ, velutinæ, concolores, lituris non diversis ; anticæ acutæ, incisura tenui

subapicali ; posticæ rotundatæ, margine exteriori vix flexo. *Mes.*  
—Abdomen apice fasciculatum. *Fæm.*—Abdomen apice acutum.

*Pseudopanthera*, p. *Hübner. Verz. Schm.* 295.

*Zerene*, p. *Treit.*

*Venilia*, *Dup. Lép.* iv. 110 ; *Steph.* ; *Herr.-Sch.* ; *Leder. V. Z. B.*  
*W.* iii. 210 ; *Guen. Phal.* i. 111 ; *Staint.*

*Melanippe*, p. *Boisd.*

Body slender. Head small. Front slightly prominent. Palpi short, porrect, extending a little beyond the head ; third joint very minute. Antennæ simple, submoniliform, minutely pubescent, almost alike in both sexes. Abdomen slightly keeled, tufted at the tip in the male, acute in the female. Legs slender, not long ; hind tibiæ not incrassated, hardly longer than the femora ; spurs long. Wings opaque, velvety, alike in colour and markings. Fore wings acute, slightly excavated behind the tips. Hind wings with the angles rounded ; exterior border very slightly bent.

## Europe.

### 1. VENILIA MACULATA.

*Aurato-flava ; alæ punctis basalibus maculisque variis flavescens pilosis nigris, fimbria nigro guttata.* Var.  $\beta$ .—*Alæ totæ flavæ ; anticæ maculis quatuor costulibus nigris.*

———, *Geoffr. Ins.* ii. 140, 6. *De Vill. Ent. Linn.* ii. 305, 426. *Harr. Engl. Lep.* pl. 28.

*Phalæna-Geometra maculata*, *Linn. Syst. Nat.* i. 2, 862, 213. *Gmel. ed. Syst. Nat.* i. 5, 2482, 213.

*Phalæna maculata*, *Scop. Ent. Carn.* 224, 557. *Fabr. Sp. Ins.* ii. 264, 132 ; *Mant. Ins.* ii. 208, 198 ; *Ent. Syst.* iii. 2, 196, 244. *Fuessl. Schw. Ins.* 39, 762. *Schr. Faun. Boic.* ii. 2, 51, 1687. *Lang. Verz.* ii. 196, 1347.

*Geometra maculata*, *Wien. Verz.* 115, 13. *Ill. N. Ausg. dess.* i. 469, 13. *Bork. Eur. Schm.* v. 475, 232. *Esp. Schm.* v. 117, pl. 23, f. 2, 3. *Götze. Ent. Beytr.* iii. 3, 298, 213. *Brahm. Ins. Kal.* ii. 1, 400, 280. *Klum. Beytr.* 123, pl. 14, f. 5. *Hübner. Geom.* pl. 25, f. 135. *Haw. Lep. Brit.* 343.

*Pseudopanthera macularia*, *Hübner. Verz. Schm.* 295, 2855.

*Zerena maculata*, *Treit. Schm.* vi. 2, 234, 9.

*Venilia maculata*, *Dup. Lép.* v. 233, pl. 187, f. 5. *Steph. Ill. Brit. Haust.* iii. 304, 1. *Herr.-Sch. Eur. Schm.* iii. 53, 139. *Guen. Phal.* i. 112, 172. *Staint. Man.* ii. 9.

*Melanippe macularia*, *Boisd. Ind.* 215, 1779.

Var.  $\beta$ .

*Geometra quadrimaculata*, *Hatch. Trans. Ent. Soc. Lond.* 245, pl. 7, f. 3. *Haw. Lep. Brit.* 343.

*Venilia quadrimaculata*, *Steph. Ill. Brit. Haust.* iii. 304, 2. *Curt Brit. Ent.* pl. 647. *Herr.-Sch. Eur. Schm.* iii. 53, 140.

$\alpha$ — $\alpha$ . England. From Mr. Stephens' collection.

$\alpha$ — $\sigma$ . England.

$\alpha$ ,  $\sigma$ . Europe. From M. Becker's collection.

$\alpha$ ,  $\gamma$ . ——— ?

## Syria.

## 2. VENILIA SYRIACATA.

*Pallide flava*; *alæ subconspersæ*; *anticæ subfalcatae*, *maculis quinque costalibus*, *litura apud marginem interiorem strigaeque marginali subapicali porphyria violaceis*; *posticæ litura apud angulum interiorem guttis tribus fimbriæ porphyrio-violaceis*.

*Venilia Syriacata*, *Guen. Phal.* i. 113, 173, pl. 21, f. 2.

Beyrout.

## Hindostan.

## 3. VENILIA HIMALAYATA.

*Mas et fœm. Luteo-flava*; *alæ maculis, atomis fimbriaque saturate violaceo-fuscis*; *anticæ vix atomariæ, linea marginali apud medium flexa, maculis duabus costalibus trigonis maculaque apud marginem interiorem, margine exteriori subflexo*; *posticæ subdentatæ, valde atomaria, linea media vaga*.

*Venilia Himalayata*, *Koll. V. Hug. Kasch.* 485. *Guen. Phal.* ii. 113, 174.

Himalaya Region.

## Genus 21. ANGERONA.

*Corpus sat robustum. Caput parvum. Frons plana. Proboscis gracilis. Palpi porrecti, graciles, brevissimi, caput non superantes; articulus 3us minimus. Pedes breves, graciles; tibiæ posticæ dilatatæ, femoribus vix longiores, calcaribus parvis. Alæ ample; anticæ apice obtusæ, margine exteriori integro subconvexo*

subobliquo; posticæ margine bis inciso. *Mas.*—Antennæ pectinatæ. Abdomen apice subfasciculatum. *Fœm.*—Antennæ simplices. Abdomen tumidum.

Crocota, p. *Hübner. Verz. Schm.* 295.

Ennomos, p. *Treit.*; *Boisd.*

Angerona, *Dup. Lép.* iv. 181; *Steph.*; *Herr.-Sch.*; *Leder. V. Z. B. W.* iii. 206; *Guen. Phal.* i. 114; *Staint.*

Body moderately stout. Head small. Front flat. Proboscis slender. Palpi porrect, slender, very short, not extending beyond the head; third joint extremely minute. Antennæ moderately pectinated in the male, simple in the female. Abdomen slightly tufted at the tip in the male, somewhat tumid in the female. Legs short, slender; hind tibiæ dilated, hardly longer than the femora, with short spurs. Wings ample. Fore wings obtuse; exterior border entire, slightly convex and oblique. Hind wings with two notches on the fore part of the exterior border.

## Europe.

### 1. ANGERONA PRUNARIA.

*Aurantiaca* (mas) aut pallide testacea (fœm.); alæ nigro strigatæ, nonnunquam cinereo-fuscæ, fasciata lata integra aut abbreviata, lunula discali fusca.

——— *Albin, Ins.* 42, pl. 69. *Wilkes, Pap.* 40, pl. 1, 6, 8, f. 1, 2. *Roës. Ins.* iii. 17, pl. 3, f. 1—3. *Sch. Icon.* pl. 17, f. 2, 3. *Uddm. diss.* 69. *De Vill. Ent. Linn.* ii. 297, 409. *Deg. Ins.* ii. 1, 250, pl. 5, f. 14.

*Phalæna-Geometra prunaria*, *Linn. Syst. Nat.* i. 2, 861, 208. *Gmel. ed. Syst. Nat.* i. 5, 2452, 208.

*Phalæna prunaria*, *Fabr. Sp. Ins.* ii. 246, 29; *Mant. Ins.* ii. 187, 29; *Ent. Syst.* iii. 2, 141, 43. *Schr. Faun. Boic.* ii. 2, 19, 1636. *Naturf.* xi. 70. 26. *Götze, Ent. Beytr.* iii. 3, 292, 208. *Müll. Faun. Fridr.* 48, 421; *Zool. Dan. Prodr.* 125, 1440. *Ross. Faun. Etrusc.* ii. 190, 1153. *Donov. Brit. Ins.* pl. xxx. *Fuessl. Schw. Ins.* 39. 759.

*Geometra prunaria*, *Wien. Verz.* 104, 17. *Ill. N. Ausg. dess.* i. 412, 17. *Esp. Schm.* v. 91, pl. 17, f. 1—7. *Bork. Eur. Schm.* v. 140, 58. *Lang. Verz.* ii. 170, 1196; 171, 1295. *Knoch, Beytr.* ii. 7, pl. 1, f. 3; pl. 7, f. 1—7. *Schwarz, Raup.* i. 13, 10; ii. 733, 801; 772, 894. *Hübner. Geom.* pl. 123, f. 122, 123. *Haw. Lep. Brit.* 283.

*Geometra Corylaria*, *Esp. Schm.* v. 95, pl. 18, f. 1—3. *Thunb. Diss.* i. 4.

*Phalæna corticalis*, *Scop. Ent. Carn.* 216, 533.

*Phalæna sordiararia*, *Schr. Faun. Boic.* ii. 2, 19, 1637.

*Phalæna sordiatata*, *Fuessl. Schw. Ins.* 41, 791. *Naturf.* xv. 65, 3, pl. 3, f. 15. *Götze, Ent. Beytr.* iii. 3, 342, 262.

*Phalæna fulvularia*, *Berl. Mag.* iv. 5, 518, 26.

*Crocota prunaria*, *Hübner. Verz. Schm.* 295, 2858.

*Enomus prunaria*, *Treit. Schm.* vi. 45, 20. *Boisd. Ind.* 184, 1458.

*Angerona prunaria*, *Dup. Lép.* iv. 181, pl. 147. f. 1, 2. *Steph Ill.*

*Brit. Haust.* iii. 172. *Herr.-Sch. Eur. Schm.* iii. 63, 159.

*Guen. Phal.* i. 115, 177. *Staint. Man.* ii. 10.

*α—dd.* England. From Mr. Stephens' collection.

*α—mm.* England.

*mm—tt.* Europe. From M. Becker's collection.

*tt—aaa.* ———?

## North America,

### 2. ANGERONA CROCATARIA.

*Læte sulphurea ; alæ ochraceo guttatæ, fascia plus minusve abbreviata et interrupta ochracea.*

*Phalæna crocataria*, *Fabr. Ent. Syst. Suppl.* 146.

*Therapis citrinaria*, *Hübner. Zutr.* 26, 250, f. 499, 500.

*Angerona crocataria*, *Guen. Phal.* i. 114, 175.

*α—i.* New York. Presented by E. Doubleday, Esq.

*j.* East Florida. Presented by E. Doubleday, Esq.

*k—m.* Orilla, West Canada. From Mr. Bush's collection.

*n, o.* Nova Scotia. From Lieut. Redman's collection.

## West Indies.

### 3. ANGERONA SOSPETA.

*Flava ; alæ antica punctis duobus parvis discalibus maculisque tribus marginalibus fuscis ; postica macula unica versus angulum interiorem fusca.*

*Phalæna (Noctua) Sospeta*, *Drury, Ins. Exot.* ii. 39, pl. 22, f. 3.

*Venilia ? Sospeta*, *Westw. ed. Drury*, ii. 41, pl. 22, f. 3. *Duncan, Nat. Libr.* xxxvi. 214, pl. 29, f. 3.

*Angerona Sospetaria*, *Guen. Phal.* i. 115, 176.

Jamaica.

## Genus 22. HYPERETIS.

Corpus sat gracile. Frons plana, subproducta. Palpi breves, subascendentes; articulus 2us robustus; 3us minimus. Antennæ maris pectinatæ, fœminæ subpectinatæ. Abdomen maris vix fasciculatum. Pedes breviusculi; tibie posticæ non incrassatæ, femoribus non longiores, calcaribus approximatis vix longis. Alæ amplæ, sæpissime obscuræ, conspersæ aut strigatæ, margine exteriori flexo; posticæ bis-emarginatæ.

Metrocampa, p. et Probole, *Herr.-Sch.*

Hyperetis, *Guen. Phal.* i. 117.

Body rather slender. Front flat, advancing between the palpi. Palpi short, slightly ascending; second joint stout; third extremely minute. Antennæ moderately pectinated in the male, slightly pectinated in the female. Abdomen of the male hardly tufted. Legs rather short; hind tibie not incrassated, as long as the femora; spurs approximate, moderately long. Wings ample, very generally dull, speckled or streaked; exterior border bent, that of the hind wings with a concavity on each side of the bend.

The following species should very probably be reduced in number, but they are here kept separate on account of the deficiency of specimens in the Museum.

## A. Alæ obscuræ.

## A. Alæ margine non nigricante.

## a. Alæ latiores, breviores.

## a. Alæ fascia marginali tota non violaceo-ferruginea.

## i. Alæ magis angulosæ.

## \* Alæ anticæ linea interiore bene determinata.

Nyssaria, *Abb.*

## \*\* Alæ anticæ linea interiore vix determinata.

subsinuaria, *Guen.*

ii. Alæ minus angulosæ. - - persinuaria, *Guen.*

## b. Alæ fascia marginali tota saturate violaceo-ferruginea.

exsinuaria, *Guen.*

## b. Alæ angustiores, longiores.

a. Alæ anticæ fascia sinuata. - - insinuaria, *Guen.*b. Alæ anticæ fascia valde sinuata. - alienaria, *Herr.-Sch.*B. Alæ margine nigricante. - - amicaria, *Herr.-Sch.*B. Alæ ochraceo-purpurascens. - - Nepiasaria, *Walk.*



## 1. HYPERETIS NYSSARIA.

*Albida ; alæ ferrugineo aut fusco transverse strigatæ, litura discali lineaque exteriori flexa ferrugineis, spatio marginali rubra guttas nonnullas nigras includente ; anticæ subfalcatæ, fascia interiore antice dilatata rubra, linea valde flexa, litura discali alba.*

*Phalæna Nyssaria, Abbot, MSS.*

*Hyperetis Nyssaria, Guen. Phal. i. 118, 178.*

a. New York. Presented by E. Doubleday, Esq.

## 2. HYPERETIS EXSINUARIA.

*Fœm. H. Nyssariæ simillima ; alæ magis albæ, strigis saturatioribus, fascia marginali tota saturate violaceo-ferruginea ; anticæ linea interiore subrecta non obliqua antice latiore.*

*Hyperetis exsinuaria, Guen. Phal. i. 118, 179.*

*H. Nyssaria, var. ?*

Pennsylvania.

## 3. HYPERETIS AMICARIA.

*Mas. Albido-testacea ; alæ strigatæ, lunula discali fasciæque lata marginali nigricante-violaceis ; anticæ linea interiore angulata, fascia intus excavata ; posticæ fascia subexcavata.*

*Metrocampa amicaria, Herr.-Sch. Schm. Exot. 40, f. 361.*

*Hyperetis amicaria, Guen. Phal. i. 118, 180.*

Cincinnati.

## 4. HYPERETIS INSINUARIA.

*Mas. H. Nyssariæ valde affinis, minor ; alæ minus angulatæ ; anticæ margine exteriori utrinque recto, fascia marginali carneo-ferruginea, litura postica duplicata nigricante, lineis magis approximatis, linea exteriori minus sinuata.*

*Hyperetis insinuaria, Guen. Phal. i. 119, 181.*

North America.

## 5. HYPERETIS PERSINUARIA.

Mas et fœm. *H. Nyssariæ affinis ; alæ longiores, angustiores, usque ad lineam exteriorem unicolores ; anticæ linea interiore nebulosa vix conspicua, linea exterior magis sinuata antice recta obliqua non arcuata, nebulis submarginalibus saturate violaceo-cinereis.*

*Hyperetis persinuaria, Guen. Phal. i. 118, 192.*

Baltimore.

## 6. HYPERETIS SUBSINUARIA.

*Pallide cinerascens ; alæ ferrugineo conspersæ, litura discali lineaque flexa ferrugineis, spatio marginali ferrugineo-cinereo, guttas nonnullas nigras includente ; anticæ lineæ interiore ferruginea, linea exterior valde flexa.*

*Hyperetis subsinuaria, Guen. Phal. i. 119, 181.*

*a. St. Martin's Falls, Albany River, Hudson's Bay. Presented by Dr. Barnston.*

*b, c. ——— ?*

## 7. HYPERETIS ALIENARIA.

*Albida ; alæ ferrugineo conspersæ, litura discali lineaque ferrugineis, spatio marginali purpurascente aut cervino-cinerascente ; anticæ linea valde angulata postice arcuata, linea interiore postice abbreviata, spatio marginali nonnunquam nigro guttata.*

*Probole alienaria, Herr.-Sch. Schm. Exot. f. 364.*

*Hyperetis alienaria, Guen. Phal. i. 120, 184.*

*a, b. Trenton Falls, New York. Presented by E. Doubleday, Esq.*

*c. ——— ?*

## 8. HYPERETIS NEPLASARIA.

Mas. *Ochraceo-purpurascens ; alæ fascia media lata ochracea extus saturate marginata, litura discali purpurascente ; anticæ fascia extus valde dilatata ; posticæ spatio exteriori toto ochraceo.*

*Male. Ochraceous-purplish, ochraceous beneath, except a very broad purplish band on each wing. Wings with a broad ochraceous middle band, which is bounded on the outer side by a deep ochra-*

ceous line ; a purplish discal mark. Fore wings with the band much dilated and forming a rounded angle on the outer side. Hind wings with the ochraceous part continued to the base of the wing. Length of the body 4—5 lines ; of the wings 10—12 lines.

a, b. Nova Scotia. From Lieut. Redman's collection.

### Genus 23. NEMATOCAMPA.

Corpus gracile. Frons plana, non producta. Palpi breves, graciles, caput vix superantes ; articulus 3us distinctus, acutus. Antennæ breves, simplices, maris robustæ. Oviductus exsertus. Tibiæ posticæ valde dilatatæ, calcari uno incrassato. Alæ integræ, fimbria brevi, margine exteriori subflexo ; anticæ apice rectangulatæ.

*Microgonia*, p. *Herr.-Sch.*

*Nematocampa*, *Guen. Phal.* i. 120.

Body slender. Front flat, not prominent. Palpi short, slender, hardly extending beyond the head ; third joint distinct, acute. Antennæ rather short, simple in both sexes, thickest in the male. Female with a prominent oviduct. Hind tibiæ much dilated, with one of the fore pair of spurs much incrassated. Wings entire ; fringe short ; exterior border slightly bent. Fore wings rectangular at the tips.

#### 1. NEMATOCAMPA RESISTARIA.

*Mas. Flavescens-testacea ; alæ nigro conspersæ, linea interiori arcuata lineisque duabus exterioribus subcontiguis fuscis, 2a undulata cinereo extus late marginata, margine exteriori subangulato ; anticæ vix acutæ.*

*Microgonia vestitaria*, *Herr.-Sch. Lep. Exot.* f. 368.

*Microgonia resistaria*, *Herr.-Sch. Lep. Exot.* 41.

Brazil.

a—c. New York. Presented by E. Doubleday, Esq.

#### 2. NEMATOCAMPA VARIOATA.

*Mas Pallide ochracea ; tibiæ posticæ subincrassatæ ; alæ dense ochraceo conspersæ, lunula discali lineisque duabus saturate rufis, spatio marginali purpureo-rufescente ; anticæ linea 1a arcuata, 2a vix arcuata strigam ad costam emittente, spatio marginali antice ochraceo ; posticæ linea 1a subobsoleta.*

*Male.* Pale ochraceous, more dull beneath. Palpi in structure like those of the typical species. Antennæ rather longer and more slender. Hind tibiæ slightly incrassated; spurs of the usual form. Wings thickly ochraceous-speckled; discal lunule and two lines deep red; marginal space purplish reddish. Fore wings with the first line curved; second line hardly curved, emitting a reddish streak from its inner side to the costa; marginal space partly ochraceous in front. Hind wings with the first line only apparent by the costa. Length of the body  $3\frac{1}{2}$  lines; of the wings  $9\frac{1}{2}$  lines.

This species differs much from the typical form in the structure of the hind tibiæ, but can hardly be considered as belonging to a distinct genus.

Rio Janeiro. In Mr. Fry's collection.

#### Genus 24. ENDROPIA.

Corpus sat robustum. Caput magnum. Frons plana, non producta. Palpi robusti, caput sat superantes; articulus 3us parvus, conicus. Tibiæ posticæ sæpe tumidæ, pilos includentes. Alæ amplæ, dense conspersæ, margine exteriori flexo; anticæ subfalcatæ; posticæ margine exteriori antico sæpe plus minusve dentato. *Mas.*—Antennæ sat late pectinatæ. *Fem.*—Antennæ simplices.

Euchlæna, p., *Hübner. Verz. Schm.* 293.

Ennomos, p., *Treit.; Boisd.*

Epione, p., et Metrocampa, p., *Herr.-Sch.*

Endropia, *Guen. Phal.* i. 122.

Body moderately stout. Head large. Front flat, not prominent. Palpi robust, porrect, extending some distance beyond the head; third joint minute, conical. Hind tibiæ of the typical species very much swollen, containing a tuft of hairs. Wings ample, thickly speckled; exterior border bent. Fore wings subfalcate. Hind wings with the fore part of the exterior border more or less dentate or scolloped in the typical species. *Male.*—Antennæ rather broadly pectinated, except at the tips. *Female.*—Antennæ simple.

A. Tibiæ posticæ dilatatæ.

A. Alæ obscuræ.

1. Alæ posticæ angulo non bene determinato.

a. Alæ anticæ minus falcatæ.

i. Alæ fascia exteriori informi. pectinaria, *Wien. Verz.*

## ii. Alæ fascia exteriorē bene determinata.

- deductaria, *Walk.*  
*b.* Alæ anticæ magis falcatæ. - - tigrinaria, *Guen.*  
*B.* Alæ posticæ angulo bene determinato.  
*a.* Alæ anticæ guttis costalibus nigris. - obtusaria, *Hüb.*  
*b.* Alæ anticæ guttis nullis costalibus nigris.  
 Astylusaria, *Walk.*  
*B.* Alæ læte ochraceæ. - - - - amcenaria, *Guen.*  
*C.* Alæ testaceæ. - - - - Muzaria, *Walk.*  
*B.* Tibiæ posticæ non dilatatæ.  
*A.* Alæ lineæ exteriorē diffuse marginata.  
*a.* Alæ anticæ lineæ 2a vix angulata.  
*a.* Alæ anticæ minus rotundatæ. - hypochraria, *Herr.-Sch.*  
*b.* Alæ anticæ plus rotundatæ. - - refractaria, *Guen.*  
*B.* Alæ lineæ 2a valde angulata. - - Mestusata, *Walk.*  
*B.* Alæ lineæ exteriorē non diffuse marginata.  
*a.* Alæ fimbria non nigricante. - - lateritiaria, *Guen.*  
*a.* Alæ fimbria nigricante. - - Oponearia, *Walk.*

## 1. ENDROPIA PECTINARIA.

*Pallide testacea; alæ ochraceo conspersæ, lineis duabus saturate ochraceis, puncto discali nigro, lineæ 2a extus ochraceo diffuse marginata, spatio exteriorē atomis nigris; anticæ subfalcatæ, lineæ 1a angulata, striga apicali obliqua nigricante; posticæ lineæ 2a ex parte duplicata.*

*Geometra pectinaria*, *Wien. Verz.* 103, 6. *Ill. N. Ausg. dess.* i. 401, 6. *Götze, Ent. Beytr.* iii. 3, 394, 136. *Hüb. Geom.* pl. 6, f. 30.

*Eanomos pectinaria*, *Treit. Schm.* vi. 1, 66, 26. *Dup. Lép.* iv. 167, pl. 145, f. 4. *Boisd. Ind.* 183, 1445.

*Therapis pectinaria*, *Herr.-Sch. Eur. Schm.* iii. 50.

*Endropia pectinaria*, *Guen. Phal.* i. 122, 186.

*a, b.* North America. From Mr. Milne's collection.

## 2. ENDROPIA TIGRINARIA.

*Sordide ochraceæ; tibiæ posticæ dilatatæ; alæ nigro conspersæ, puncto discali nigro, lineæ exteriorē subrecta ferruginea intus pallido diffuse marginata, maculis nonnullis submarginalibus*

*nigris nonnunquam subobsoletis ; anticæ falcatae, linea interiore angulosa ferruginea aut nigricante, spatio apicali pallido extus nigricante marginato ; posticæ linea non duplicata*

*Endropia tigrinaria*, Guen. *Phal.* i. 123, 187.

*a.* United States. Presented by E. Doubleday, Esq.

*b, c.* Orilla, West Canada. From Mr. Bush's collection.

### 3. *ENDROPIA OBTUSARIA.*

*Albido-testacea ; alæ cervino strigatae, puncto discali nigro, linea exteriori fusca, spatio marginali purpurascente-cinereo ; anticæ subfalcatae, linea subarcuata, striga subapicali diffusè nigricante ; posticæ linea duplicata.*

*Geometra obtusaria*, Hübn. *Geom.* f. 390.

*Euchlæna obtusaria*, Hübn. *Verz. Schm.* 293, 2841.

*Endropia obtusaria*, Guen. *Phal.* i. 123, 188.

North America.

### 4. *ENDROPIA AMCENARIA.*

*Ochracea : alæ ferrugineo nigroque conspersæ, linea media obliquè subrecta fusca extus rufescente late marginata ; anticæ falcatae, costa basi nigro punctata, linea interiore antice angulata, linea exteriori guttis albis nigro marginatis signata, macula apicali alba nigro marginata.*

*Endropia amcænaria*, Guen. *Phal.* i. 124, 190, pl. 3, f. 8.

North America.

### 5. *ENDROPIA HYPOCHRARIA.*

*Sordide ochraceo-cinerea ; tibiarum posticarum non dilatatarum ; alæ ochraceo conspersæ, puncto discali nigro, linea exteriori fusca angulata intus fuscescente-cinereo late marginata, linea submarginali fuscescente valde diffusa, margine exteriori vix flexo ; anticæ vix falcatae, linea interiore fuscescente angulata diffusa ; posticæ margine exteriori subsinuato.*

*Epione hypochraria*, Herr.-Sch. *Exot. Schm.* 41, f. 207, 208.

*Endropia hypochraria*, Guen. *Phal.* i. 125, 191.

*a—c.* United States. Presented by E. Doubleday, Esq.

## 6. ENDROPIA REFRACTARIA.

**Mas et fem.** *E. hypochrariz valde affinis, minor, pallidior; alæ disco fusco-cinerascente olivaceo, spatio marginali subviolaceo-albo; anticæ margine exteriori minus flexo; posticæ breviores, obtusiores, angulis minus determinatis.*

*Endropia refractaria*, Guen. *Phal.* i. 125, 192.

The specimeu here registered is too much faded to allow of its being referred with certainty to the above species.

a. New York. Presented by E. Doubleday, Esq.

## 7. ENDROPIA LATERITIARIA.

**Mas.** *Fuscescente-rufa; frons cinerea; alæ violaceo tinctæ, subdentatæ, strigis lineisque duabus incertis ferrugineis, puncto discali nigricante; anticæ subrotundatæ, lineis subparallelis.*

*Endropia lateritiaria*, Guen. *Phal.* i. 125, 193.

North America.

**Var.?** *Ferrugineo-cinerea; tibiæ posticæ non dilatatæ; alæ nigro subconsersæ, puncto discali nigro, linea nigricante subundulata intus ferrugineo diffuse marginata extus vix duplicata; anticæ fulcatæ, linea interiore nigricante subundulata, margine exteriori subflexo; posticæ margine exteriori subsinuato.*

**Female.** Ferruginous-cinereous. Hind tibiæ not dilated. Wings minutely speckled with black, with a black discal point and with a slightly undulating blackish line, which is diffusedly bordered with ferruginous on the inner side, and is very incompletely doubled on the outer side. Fore wings falcate; interior line blackish, slightly undulating; exterior border slightly bent. Hind wings with the exterior border slightly sinuated. Length of the body  $5\frac{1}{2}$  lines; of the wings 16 lines.

a, b. Trenton Falls, New York. Presented by E. Doubleday, Esq.

## 8. ENDROPIA DEDUCTARIA.

*Albido-cinerea, testaceo subtineta; tibiæ posticæ dilatatæ; alæ nigricante subconsersæ, lineis duabus fuscis, puncto discali*

*nigro, linea 1a indistincta, 2a fasciaque ochracea extus dentata contiguæ; anticæ subfalcata, margine exteriori vix flexo; posticæ linea 2a subduplicata, margine exteriori sub sinuato.*

*Male.* Whitish cinereous, with a slight testaceous tinge. Hind tibiæ dilated. Wings minutely blackish-speckled, with two brown slightly undulating lines and with a black discal point; first line indistinct; second line adjoining an ochraceous more exterior band, which is dentate on the outer side. Fore wings subfalcate, exterior border hardly bent. Hind wings with the exterior line partly double; the exterior border slightly sinuated. Length of the body 8 lines; of the wings 18 lines.

This may be a local variety of *E. pectinaria*.

*a.* East Florida. Presented by E. Doubleday, Esq.

#### 9. ENDROPIDIA ASTYLUSARIA.

*Mas.* Albido-ochracea; tibiæ posticæ dilatata; alæ nigro subconspersæ, puncto discali nigro, lineis duabus fusciscentibus, 1a ochraceo diffuse marginata, spatio marginali rufescente-ochraceo purpurascens subincta; anticæ subfalcata, macula apicali elongata, liturisque posterioribus albis, linea interiore valde flexa, margine exteriori subflexo; posticæ linea 2a subrecta, margine exteriori biangulato.

*Male.* Whitish ochraceous. Hind tibiæ dilated. Wings thinly black-speckled, with a black discal point and with two brownish lines; first line diffusely bordered with ochraceous; space between the second line and the exterior border (with the exception of the hind part in the hind wings) reddish-ochraceous, with a slight purplish tinge. Fore wings subfalcate; an apical elongated white spot, which with some small hindward white marks forms a very incomplete line; interior line much bent; exterior line bent in front; exterior border slightly bent. Hind wings with the second line nearly straight; exterior border forming two distinct angles. Length of the body 6—7 lines; of the wings 16—18 lines.

*a, b.* East Florida. Presented by E. Doubleday, Esq.



## 10. ENDROPIA MADUSARIA.

**Mas.** *Testaceo-albida; tibiæ posticæ incrassatæ, non dilatatæ; alæ ochraceo dense conspersæ, puncto discali nigro, lineis duabus distinctis concisis saturate ochraceis, linea 2a subduplicata; anticæ subfalcatæ, linea 1a biangulata, 2a antice subangulata postice subarcuata, spatio marginali purpurascente-ochraceo, striga apicali lata albida, plaga posteriore albida nonnunquam obsoleta, margine exteriori non flexo; posticæ lineis subrectis, margine exteriori vix sinuato.*

**Male.** Testaceous-whitish. Hind tibiæ somewhat incrassated, not dilated. Wings thickly speckled with ochraceous, with a black discal point, and with two distinct concise deep ochraceous lines; the exterior line partly double; the double part forming a loop on the outer side of the line. Fore wings subfalcate; first line forming two slight angles; second line slightly curved hindward, slightly angular near the costa; space beyond wholly purplish ochraceous, with the exception of a broad whitish apical streak, which is occasionally followed by a whitish patch; exterior border convex, not bent. Hind wings with the lines almost straight; exterior border slightly bent, hardly sinuated on each side of the bend. Length of the body  $6\frac{1}{2}$  lines; of the wings 18 lines.

—c. East Florida. Presented by E. Doubleday, Esq.

## 11. ENDROPIA OPONEARIA.

**Fem.** *Pallide cinerea, ferrugineo densissime conspersa; tibiæ posticæ non incrassatæ; alæ lineis duabus concisis obscure ferrugineis, puncto discali nigro, linea exteriori subrecta extus diffuse ochraceo-fulvescente marginata, spatio marginali purpurascente suffuso, fimbria nigricante; anticæ subfalcatæ, linea 1a angulata, margine exteriori subflexo; posticæ lineis parallelis, margine exteriori subdentato.*

**Female.** Pale cinereous, very thickly ferruginous-speckled. Hind tibiæ not incrassated. Wings with two slender concise dark ferruginous lines and with a black discal point; exterior line nearly straight, diffusely bordered with ochraceous-tawny on the outer side; space beyond (especially in the fore wings) mostly violet-tinged; fringe blackish. Fore wings subfalcate; first line angular; exterior border slightly bent. Hind wings with the lines parallel;

border slightly emarginate between the veins. Length of the body 6 lines; of the wings 16 lines.

John's Bluff, East Florida. Presented by E. Doubleday.

## 12. ENDROPIA MESTUSATA.

*Ferruginea; tibia postica non dilatata; alae albidae, ferrugineo conspersae, atomis basi et apud interioris marginem anteriorem subconfluentibus, linea interiore indistincta diffusa, puncto discali nigro, fringescescente notata, margine exteriori subflexo; anticae angulatae, linea interiore flexa, linea exterioris angulo determinato; postica linea interiore subobsoleta.*

*Male.* Ferruginous. Hind tibiae not dilated. Wings white, with ferruginous speckles, which are almost confined to the fore wings and along the inner side of the hind wings; the latter is accompanied by a more exterior indistinct line; discal point black; fringe with brownish markings; veins; exterior border slightly bent. Fore wings with the tips, not falcate; interior line bent; exterior line forming a distinct angle before the middle. Hind wings with the first line nearly obsolete; second line slightly undulating; outer border slightly excavated in front. Length of the body 14 lines.

Clinton Falls, New York. Presented by E. Doubleday. From Mr. Bush's collection.

## 13. ENDROPIA MUZARIA.

*et foem. Testacea; alae ferrugineo conspersae vix lineis ferrugineis, la angulata diffusa indistincta, linea interiore lata valde obliqua, puncto discali nigricante, spatio discali rufescente-ferrugineo; anticae subfalcatae, guttis subapicalibus nigricantibus, margine exteriori flexo; posticae majoris lineae interiore valde dentato.*

*Male and female.* Testaceous. Wings ferruginous, sometimes and sometimes hardly tinged with ferruginous; lineae; interior line angular, diffuse, indistinct; discal point black; exterior line undulating, very oblique; space between the lines exterior border reddish ferruginous. Fore wings with two or three subapical blackish dots; exterior border

petly bent. Hind wings with the exterior border deeply and  
lately dentate. Length of the body 6—7 lines; of the wings  
1—20 lines.

—1. New York. Presented by E. Doubleday, Esq.

## South America.

### 14. ENDROPIA ANILIARIA.

*Max. Ochracea; alæ nigro conspersæ, lineis duabus nigricantibus, guttis duabus discalibus duabusque submarginalibus nigris, linea 2a vix undulata intus pallido marginata; anticæ sub-falcata, linea 1a arcuata extus pallido marginata, striga apicali pallida extus nigro marginata; posticæ linea 1a recta.*

*Metrocampa aniliaria*, Herr.-Sch. *Exot. Schm.* 40, f. 362.

*Endropia aniliaria*, Guen. *Phal.* i. 124, 189.

*mezuela.*

### Genus 25. METROCAMPA.

Corpus sat robustum. Frons plana, non prominens. Palpi robusti, porrecti, caput paullo superantes; articulus 3us minimus. antennæ maris pectinatæ, fœminæ simplices. Thorax dense villosus. Pedes validi; tibiæ posticæ non incrassatæ, calcaribus revinculis. Alæ amplæ; margo exteriore flexus, dentatus.

*Adalimia*, p., Hübn. *Verz. Schm.* 286.

*Empoæ*, Lamarck.

*Elopiæ*, p., Treit.

*Metrocampa*, Latr. *Cons. Gén.* 366; *Fam. Nat.* 477; *Dup.*; *Boisd.*; *Steph.*; *Herr.-Sch.*; *Led. V. Z. B. W.* iii. 201; *Guen. Phal.* i. 126.

Body rather stout. Front flat, not prominent. Palpi robust, erect, extending a little beyond the head; third joint extremely minute. Antennæ moderately pectinated to the tips in the male, simple in the female. Thorax densely villose. Legs stout; hind tibiæ not incrassated; spurs rather short. Wings ample; exterior border slightly dentate or scalloped, bent in the middle, the angle more prominent in the hind wings than in the fore wings.

Type, *M. honoraria*.

*M. margaritata* should not be included in the same genus with *M. honoraria* on account of its slender form, its minute pupa and the different structure of its wings.

## Europe.

### 1. METROCAMPA HONORARIA.

*Rufescente-carnea ; alæ fusco indistincte strigatæ, linea exterior recta obliqua fusca extus albido marginata, fimbria rufa apice alba ; anticæ subfalcatæ, linea interiore recta obliqua fusca intus albido submarginata.*

*Geometra honoraria*, *Wien. Verz.* 315, 18. *Ill. N. Ausg. den.* 399, 2, 3. *Götze, Ent. Beytr.* iii. 3, 403, 215. *Hübner, Geom.* pl. 3, f. 16 ; pl. 4, f. 17.

*Geometra excisaria*, *Esp. Schm.* v. 101, pl. 19, f. 5.

*Bombyx honorifica*, *Esp. Schm.* v. 185, pl. 33, f. 1, 2.

*Geometra adsociaria*, *Bork. Eur. Schm.* v. 78, 36.

*Eudalimia honoraria*, *Hübner, Verz. Schm.* 286, 2792.

*Ellopiæ honoraria*, *Treit. Schm.* vi. 1, 90, 1.

*Metrocampa honoraria*, *Dup. Lép.* iv. 128, pl. 141, f. 3. *Bösch, Ind.* 181, 1433. *Herr.-Sch. Eur. Schm.* iii. 40, 106. *Germ. Phal.* i. 126, 194.

a, b. Europe. From M. Becker's collection.

### 2. METROCAMPA MARGARITATA.

*Margaritaceo-viridis ; alæ linea exterior recta obliqua ochracea extus albo marginata ; antica subfalcata, linea interiore recta obliqua ochracea intus albo marginata, margine exteriori integro.*

———, *Geoff. Ins.* ii. 137, 57. *Sepp, Ins.* ii. pl. 3, f. 1—  
*DeVill. Ent. Linn.* ii. 331, 498.

*Phalæna-Geometra margaritata*, *Linn. Syst. Nat.* i. 2, 865, 23.  
*Gmel. ed. Syst. Nat.* i. 5, 2455, 231.

*Phalæna margaritata*, *Fabr. Mant. Ins.* ii. 185, 8; *Ent. Syst.* i. 2, 131, 10. *Götze, Ent. Beytr.* iii. 315, 231. *Panz. Faun. Germ.* 63, 23.

*Geometra margaritata*, *Wien. Verz.* 95, 1. *Bork. Eur. Schm.* 12, 1. *Donov. Ins. Brit.* xvi. 543. *Ill. N. Ausg. den.* i. 36, 1. *Hübner, Geom.* pl. 3, f. 13.

- Geometra sesquistriata*, *Knoch*, i. 1, pl. 1, f. 1. *Lang. Verz.* ii. 174, 1223.
- Bombyx sesquistriga*, *Brahm*, *Kal.* ii. f. 50, 19, 61. *Schw. Raup. Kal.* ii. 456, 472; 596, 623; 717, 784; 770, 890.
- Bombyx sesquistriata*, *Bork. Eur. Schm.* iii. 454, 176. *Esp. Schm.* iii. 368, pl. 72, f. 1, 2.
- Phalena buplenaria*, *Schr. Faun. Boic.* ii. 2, 3, 1608. *Panz. Faun. Germ.* 41, 23.
- Phalena vernaria*, *Hübfn. Berl. Mag.* iv. 5, 506, 4. *Naturf.* xi. 65, 4.
- Phalena vitriolata*, *Cyrilli, Ent. Neap.* pl. 4, f. 4.
- Elopiia margaritaria*, *Treit. Schm.* vi. 1, 92, 2.
- Eudalimia margaritaria*, *Hübfn. Verz. Schm.* 286, 2791.
- Metrocampa margaritata*, *Dup. Lép.* v. 125, pl. 141, f. 2. *Lyon, Ins.* 300. pl. 32, f. 1—9. *Boisd. Ind.* 181, 1432. *Herr.-Sch. Eur. Schm.* iii. 39, 105. *Guen. Phal.* i. 128, 196. *Staint. Man.* ii. 10.
- Campæa margaritata*, *Steph. Ill. Brit. Haust.* iii. 176, 1.
- t-a. England. From Mr. Stephens' collection.
- s,p. England. From Mr. Stevens' collection.
- g. Scotland. From Mr. Foxcroft's collection.
- r, s. England.
- t-w. Europe.

## North America.

### 3. METROCAMPA PRÆGRANDARIA.

**Fœm.** *M. honorariæ simillima*; *alæ magis ochraceæ, atomis distinctioribus*; *posticæ subtus sulphureo-subflavescentes*; *thorax sulphureo-flavus*.

*Metrocampa prægrandaria*, *Guen. Phal.* i. 128, 195.

North America.

### 4. METROCAMPA PERLATA.

**Mas.** *M. margaritatæ simillima, minor*; *alæ anticæ lineis duabus omnino parallelis, margine exteriori magis angulato*; *posticæ plus rotundatæ, minus dentatæ, angulo magis caudiformi*.

*Metrocampa perlata*, *Guen. Phal.* i. 128, 197.

North America.

s. Trenton Falls, New York. Presented by E. Doubleday, Esq.

## Genus 26. ELLOPIA.

Corpus gracile. Frons plana, non producta. Palpi breves, gracillimi, oblique ascendentes; articulus 3us conicus, minimus. Antennæ maris late pectinatæ, sceminæ simplices. Pedes graciles tibiæ posticæ non incrassatæ, calcaribus sat longis. Alæ integræ tenues, concolores, subhyalinæ, margine exteriori non flexo.

Terina, Hübn. Verz. Schm. 283.

Ellopiæ, Treit. Schm. i. 89; Steph.; Led. V. Z. B. V. W. iii. 200.

Guen. Phal. i. 129.

Metrocampa, p., Herr.-Sch.

Body slender. Front flat, not prominent. Palpi short, very slender, obliquely ascending; third joint conical, very minute. Antennæ broadly pectinated in the male, simple in the female. Legs slender; hind tibiæ not incrassated; spurs moderately long. Wings entire, delicate, slightly transparent, alike in colour; exterior border not angular nor bent.

Type, *E. fasciaria*.

## Europe.

## 1. ELLOPIA FASCIARIA.

*Rufescente-carnea; alæ lineis duabus subundulatis saturatioribus (mas) aut albidis (fæm.); posticæ linea interiore obsoleta.*

———, DeVill. Ent. Linn. ii. 306, 429. Sepp, Ins. iv. pl. 50.

Phalæna-Geometra fasciaria, Linn. Syst. Nat. i. 2, 862, 216; Faun. Suec. 1242. Clerck, Icon. pl. 5, f. 5. Gmel. ed. Syst. Nat. i. 5, 2462, 216.

Phalæna-Geometra prosapiaria, Linn. Syst. Nat. i. 2, 864, 222; Faun. Suec. 1252. Uddn. Diss. 66. Clerck, Icon. pl. 3, f. 1. Gmel. ed. Syst. Nat. i. 5, 2464, 222.

Phalæna fasciaria, Fabr. Ent. Syst. iii. 2. 157, 100. Brahm, Ins. Kal. ii. 226, 121. Schr. Faun. Boic. ii. 2, 1, 1606. Lang. Verz. ii. 173, 1216. Naturf. xi. 71, 32. Müll. Zool. Dan. Prodr. 125, 1444.

Geometra fasciaria, Wien. Verz. 96, 2. Ill. N. Ausg. Dess. i. 363, 2. Bork. Eur. Schm. v. 18, 4. Götze, Ent. Beytr. iii. 3, 301, 216. Panz. Ins. 24. Hübn. Geom. pl. 1, f. 5.

Phalæna neustriaria, Hüfn. Berl. Mag. iv. 5, 520.

Terina fasciaria, Hübn. Verz. Schm. 283, 2766.

*Ellopiæ fasciaria*, *Treit. Schm.* vi. 1, 97, 4. *Dup. Lép.* iv. 133, pl. 141, f. 5. *Steph. Ill. Brit. Haust.* iii. 177, 1. *Boisd. Ind.* 181, 1431. *Guen. Phal.* i. 130, 198. *Staint. Man.* ii. 11.

*Metrocampe fasciaria*, *Herr.-Sch. Eur. Schm.* iii. 39, 104.

s-j. England. From Mr. Stephens' collection.

k-m. England. From Mr. King's collection.

n, o. Scotland. From Mr. Dove's collection.

p-r. England.

t, u. Europe. From M. Becker's collection.

## 2. ELLOPIA MANITIARIA.

*Mas. Saturate rubra; thorax ochraceo-flavus; abdominis segmenta pallido marginata; alæ lineis indistinctis.*

*Metrocampe manitaria*, *Herr.-Sch. Eur. Schm.* pl. 58, f. 355.

*Metrocampe fasciaria*, var., *Herr.-Sch. Eur. Schm.* iii. 39.

*Ellopiæ manitaria*, *Guen. Phal.* i. 131, 199.

## 3. ELLOPIA PRASINARIA.

*Alliaceo-viridis; alæ lineis duabus subundulatis albis, fimbria pallida; anticæ costa ochracea; posticæ linea interiore obsoleta.*

*Geometra prasinaria*, *Wien. Verz.* 96, 3. *Bork. Eur. Schm.* v. 18, 5. *Hübner. Geom.* pl. 1, f. 4.

*Ellopiæ prasinaria*, *Dup. Lép.* iv. 131, pl. 141, f. 4. *Everm. Faun. Voly.-Ural.* 369. *Guen. Phal.* i. 131, 200.

*Ellopiæ fasciaria*, var., *Treit. Suppl.* 175. *Dup. Boisd. Herr.-Sch. Led.*

France. Germany.

## North America.

### A. Palpi breves.

#### A. Alæ anticæ linea exteriori valde flexa.

##### a. Alæ linea exteriori concisa.

a. Alæ linea exteriori vix angulata. - *fervidaria*, *Hübner.*

b. Alæ linea exteriori sat angulata. - *fiscellaria*, *Guen.*

a. Alæ linea exteriori non concisa. - *flagellaria*, *Guen.*

#### B. Alæ linea exteriori non valde flexa.

##### a. Alæ anticæ lineis duabus approximatis.

- a. Alæ lineis concisis. - - - pultaria, *Guen.*  
 b. Alæ lineis diffusis. - - - Athasaria, *Walk.*  
 B. Alæ anticæ lineis duabus remotis.  
 a. Alæ margine exteriori angulato. - Panisaria, *Walk.*  
 b. Alæ margine exteriori non angulato. æqualiaria, *Walk.*  
 B. Palpi sat longi.  
 A. Alæ anticæ spatio intermedio saturatiore. - placearia, *Guen.*  
 B. Alæ anticæ spatio intermedio non saturatiore.  
 Amyrisaria, *Walk.*

#### 4. ELLOPIA PULTARIA.

**Fœm.** *Sordide straminea; caput et thorax anticus ochracea; alæ lineis indistinctis pallide cinereis et testaceis; anticæ lineis subparallelis, 2a apud costam obsoleta, margine exteriori vix angulato; posticæ fere rotundatæ, margine exteriori fere recto.*

*Ellopia pultaria, Guen. Phal. i. 131, 201.*

North America.

**Var.? Mas.** *Pallide testaceo-cinerea; thorax ochraceus; alæ atomis densis indistinctis, linea exteriori obliqua vix undulata lineaque submarginali valde indistincta et incompleta pallide subochraceis; anticæ lineis duabus subparallelis, margine apicali nigricante.*

**Var.? Male.** Pale cinereous, with a very slight testaceous tinge. Thorax ochraceous. Wings thickly but indistinctly speckled with dull pale ochraceous; an oblique hardly undulating exterior line and a very indistinct and incomplete submarginal line of the same hue. Fore wings with an interior line which is almost parallel to the exterior one; exterior part of the costa and fore part of the exterior border blackish; exterior border slightly bent, as is also that of the hind wings. Length of the body 5—6 lines; of the wings 14—16 lines.

a—f. Trenton Falls, New York. Presented by E. Doubleday, Esq.

#### 5. ELLOPIA? PLACEARIA.

**Mas.** *Pallide ochracea; palpi pilosi, caput sat superantes; alæ anticæ cinereo transverse strigatæ, lineis duabus flexis sat approximatis postice parallelis, spatio intermedio saturate ochraceo, margine exteriori valde angulato; posticæ pallidiores, subrufescentes, linea una indeterminata subtus distinctissima, margine exteriori subangulato.*



*Ellopia?* *placearia*, *Guen. Phal.* i. 132, 202.

California.

#### 6. ELLOPIA FERVIDARIA.

*Pallide testaceo-cinerea; thorax ochraceus; alæ linea obliqua vix undulata nigricante extus pallido marginata; anticæ linea interiore subarcuata strigaeque discali nigricantibus, margine exteriori non flexo; posticæ margine exteriori subflexo.*

*Terina fervidaria*, *Hübner. Zutr.* 8, 205, f. 409, 410; *Verz. Schm.* 283, 2767.

*Ellopia fervidaria*, *Guen. Phal.* i. 132, 203.

Georgia.

*Var.?* *Mas. Cinereo-testacea; alæ atomis densis indistinctis pallide fuscis, linea exteriori subundulata obscure fusca extus ochraceo marginata; anticæ linea interiore intus ochraceo marginata strigaeque discali obscure fuscis, margine exteriori subflexo.*

*Var. Male.* Cinereous-testaceous. Wings thickly but indistinctly speckled with pale brown; a dark brown slightly undulating exterior line ochraceous-bordered on the outer side. Fore wings with the discal streak and the interior line dark brown, the latter ochraceous-bordered on the inner side; exterior border slightly bent. Hind wings with the exterior border more distinctly bent. Length of the body 6 lines; of the wings 17 lines.

a. New York. Presented by E. Doubleday, Esq.

#### 7. ELLOPIA FISCELLARIA.

*E. fervidarise obscurior; alæ lineis concisis nigricantibus ochraceo marginatis antice remotis postice approximatis parallelis, striga discali; anticæ margine exteriori sat angulato antice subconcavo; posticæ rotundatæ, unidentatæ.*

*Ellopia fiscellaria*, *Guen. Phal.* i. 133, 204.

North America.

Var.? *Mas.* *Pallide cinereo-testacea; caput subochraceum; alæ atomis densis indistinctis pallide fuscis; anticæ linea undulata obscure fusca ochraceo marginata valde concisa, margine exteriori perparum flexo; anticæ linea interiore subarcuata, striga discali; posticæ striga discali parva.*

Var.? *Male.* Pale cinereous-testaceous. Head and fore part of the thorax more ochraceous. Wings thickly but indistinctly speckled with pale brown; exterior line dark brown, very concise, irregularly undulating, ochraceous-bordered on the outer side; exterior border very slightly bent. Fore wings with the discal streak and an interior irregularly and slightly curved interior line, the latter ochraceous-bordered on the inner side. Hind wings with a smaller discal mark. Length of the body 5—6 lines; of the wings 16—18 lines.

*a, b.* Trenton Falls, New York. Presented by E. Doubleday, Esq.  
*c—e.* Nova Scotia. From Lieut. Redman's collection.

#### 8. ELLOPIA FLAGITIARIA.

*Fœm. Minor; alæ tenuiores, pallidiores, magis hyalinæ, atomis subtilioribus, lineis nigricantibus latioribus, postice approximatis, 2i flexura bene determinata; anticæ margine exteriori sat angulato; posticæ litura discali nulla.*

*Ellopia flagitaria, Guen. Phal. i. 133, 205.*

New York. Canada.

Var.? *Sordide cinerea, testaceo subincta; alæ fusco pallido densissime conspersæ, linea exteriori valde undulata intus diffuse fusco extus testaceo concise marginata, litura discali fusca bene determinata, margine exteriori vix flexo; anticæ linea interiore subundulata subarcuata.*

Var.? Dingy cinereous, with a testaceous tinge. Wings very thickly speckled with pale brown; exterior line very undulating, diffusedly brown on the inner side, concisely bordered with testaceous on the outer side; discal mark brown, very distinct; bend of the exterior border very slight. Fore wings with a slightly curved and undulating interior line, concisely testaceous-bordered on the inner side. Length of the body 5—6 lines; of the wings 13—15 lines.

This species varies much in the hindward distance of the two lines from each other.

c-j. Nova Scotia. From Lieut. Redman's collection.

k. New York. Presented by E. Doubleday, Esq.

### 9. ELLOPIA PANISARIA.

**Fem.** *Subtestaceo-cinerea; alæ dense nigricante conspersæ, gutta discali nigra distinctissima, linea exterior nigricante sub-undulata, margine exterior angulata; anticae rectangulatae, linea interior nigricante diffusa subarcuata.*

**Female.** Cinereous, with a slight testaceous tinge. Wings thickly and minutely blackish speckled; discal dot black, very distinct; exterior line blackish, slightly undulating; exterior border distinctly angular. Fore wings rectangular at the tips; interior line blackish, diffuse, slightly curved. This species has most resemblance to *E. flagellaria*, but differs from it and from the neighbouring species by the much less bent exterior line, which consequently is more remote hindward from the interior line. Length of the body 5 lines; of the wings 14 lines.

a. New York. Presented by E. Doubleday, Esq.

### 10. ELLOPIA ATHASARIA.

**Mas.** *Testacea; alæ cinereæ, semihyalinæ, vix testaceo tinctæ, fusco dense conspersæ, linea media fuscescente intus diffusa vix angulata, margine exterior vix flexo; anticae apice subrotundatae, litura discali lineaque interior fuscescentibus.*

**Male.** Testaceous. Wings cinereous, semihyaline, with a very slight testaceous tinge, thickly and very minutely speckled with brown; a brownish middle line which is diffuse on the inner side, and is indistinctly angular towards the costa of the fore wings and in the middle of the hind wings; exterior border hardly bent. Fore wings slightly rounded at the tips, with a brown discal mark between the two lines, of which the second is more interior than the first, and approaches it slightly hindward. This species is very distinct from *E. pullaria*, which it resembles most in the structure of the lines. Length of the body 6 lines; of the wings 17 lines.

a. New York. Presented by E. Doubleday, Esq.



*calæ, linea interiore tenui angulata, puncto discali nigro, margine exteriori subflexo; posticæ margine exteriori non flexo.*

**Male.** Luteous-testaceous, the former hue most prevalent on the under side. Palpi obliquely ascending; third joint very minute. Antennæ broadly pectinated; branches pubescent. Wings hardly speckled above, distinctly speckled beneath; exterior line straight, oblique, ochraceous, whitish-bordered on the outer side, obsolete near the costa. Fore wings subfalcate; interior line slight, acutely angular; discal point black; exterior border slightly bent. Hind wings with the exterior border not bent. Length of the body 6 lines; of the wings 14 lines.

a. Oajaca, Mexico. From M. Sallé's collection.

## Australia.

### 14. ELLOPIA? CUMULARIA.

**Mas.** *Albido-cinerea; alæ anticæ acutæ, linea lata subobliqua fusca antice furcata testaceo marginata, margine exteriori vix flexo; posticæ linea latissima angulata fusca extus testaceo late marginata, margine exteriori sat angulato.*

*Ellopia cumularia*, Guen. *Phal.* i. 133, 206.

Australia.

### Genus 27. LEUCULA.

**Corpus gracile.** Frons linguiformis, plana, non fasciculata. Palpi ensiformes, gracillimi, caput vix superantes; articuli indistincti. Antennæ maris et fœminæ pectinatæ. Pedes longi, graciles; tibiæ non incrassatæ. Alæ albæ, amplæ, tenues, integræ, rotundatæ, venis lineisque cinereis; anticæ vena submediana basi dilatata et vesiculosa.

*Leucula*, Guen. *Phal.* i. 134.

**Body slender.** Front linguiform, flat, without a tuft. Palpi ensiform, very slender, hardly extending beyond the front; joints indistinct. Antennæ pectinated in both sexes; branches longest in the male. Legs long, slender; tibiæ not incrassated. Wings ample, delicate, entire, rounded, white; veins and lines cinereous. Fore wings with the submedian vein dilated and vesiculous at the base, and having in front of it a little cavity.



nore distincta. *Mas.*—Antennæ late pectinatæ, apice filiformes. Alæ anticæ apice acutæ aut quadratæ. *Fœm.*—Antennæ filiformes. Alæ anticæ acutæ aut falcatæ.

*Caberodes*, *Guen. Phal.* i. 135.

Body slender. Front smooth, not prominent, with no tuft. Proboscis long. Palpi slender, squamous, wide apart, extending but little beyond the head; joints distinct. Legs long, stout, smooth; hind tibiæ long, hardly incrassated. Wings smooth, alike, velvety, not dentate, with one straight line. Fore wings acute; exterior border angular; interior line distinct. *Male.*—Antennæ broadly pectinated, filiform at the tips. Fore wings acute or quadrate at the tips. *Female.*—Antennæ filiform. Fore wings acute or falcate.

### North America,

#### A. Alæ anticæ bilineatæ.

A. Alæ anticæ cinerææ. - - - metrocamparia, *Guen.*

B. Alæ anticæ ochraceo-cinereæ. - - - remisaria, *Guen.*

#### C. Alæ anticæ ochraceo-albæ.

A. Tibiæ posticæ sinuatæ. - - - imbraria, *Guen.*

#### B. Tibiæ posticæ non sinuatæ.

##### a. Alæ anticæ linea exterior non arcuata.

##### i. Alæ anticæ linea exterior extus albido marginata.

\* Alæ posticæ puncto discali lineaque exterior remotis.  
superaria, *Guen.*

\*\* Alæ posticæ puncto discali lineaque exterior approximatæ.

† Alæ posticæ linea arcuata. - confusaria, *Hübner.*

†† Alæ posticæ linea recta. - floridaria, *Guen.*

##### ii. Alæ anticæ linea exterior albido non marginata.

ineffusaria, *Guen.*

b. Alæ anticæ linea exterior arcuata - phasianaria, *Guen.*

B. Alæ anticæ trilineatæ. - - - interlinearia, *Guen.*

### 1. CABERODES METROCAMPARIA.

*Mas.* *Columbi-cinerea*; alæ puncto discali, linea exterior obscura extus albo marginata; anticæ linea interior intus albo marginata, linea exterior arcuata, margine exterior recto, costa pallidiore; posticæ linea exterior subarcuata.

*Caberodes metrocamparia*, *Guen. Phal.* i. 137, 212.

North America.





## 5. CABERODES MAJORARIA.

**Mas et fœm.** *Ochraceo-alba; alæ cinereo subconspersæ, linea exteriori subrecta pallide fusca intus subdiffusa, puncto discali distincto, margine exteriori flexo; anticæ acutæ, linea interiori angulata.*

*Caberodes majoraria*, Guen. *Phal.* i. 138, 216.

North America.

## 6. CABERODES INEFFUSARIA.

**Var.? Fœm.** *Testaceo-albida, subtus testacea; alæ supra vix conspersæ, subtus sat conspersæ, puncto discali supra obsoleto, linea exteriori obliqua subrecta ochracea, margine exteriori vix flexo; anticæ subfalcatæ, lineis apud costam obsoletis, linea interiori tenui vix angulata.*

*Caberodes ineffusaria*, Guen. *Phal.* i. 138, 217.

North America.

a. ——— ?

## 7. CABERODES FLORIDARIA.

**Var.? Testaceo-albida; alæ cervino subconspersæ, subtus obscuriores, puncto discali fusco, linea obliqua recta cervina extus ochraceo marginata margine exteriori flexo; anticæ apice rectangulatæ, linea interiori ochracea tenui angulata, linea exteriori apud costam obsoleta.**

*Caberodes floridaria*, Guen. *Phal.* i. 139, 218.

North America.

a, b. ——— ?

## 8. CABERODES CONFUSARIA.

*Ochraceo-albida; alæ subconspersæ, linea exteriori ochracea obliqua; anticæ linea exteriori recta; posticæ linea exteriori arcuata. Mas.—Alæ linea exteriori pallido extus marginata, linea interiori nigricante vix arcuata. Fœm.—Alæ anticæ subfalcatæ, linea interiori obsoleta.*

*Esareia confusaria*, Hübn. *Exot. Schm.* i. *Lep.* 5. *Geom.* i. *Amplæ*, i. *Esareæ*, A. *Capaces*, b.

*Edalimia confusaria*, Hübn. *Verz. Schm.* 287, 2793.

*Caberodes confusaria*, *Guen. Phal.* i. 139, 220.

*Caberodes floridaria*, var. ?

North America.

#### 9. CABERODES PHASIANARIA.

Var. ? *Mas.* *Pallide ochracea ; alæ vix conspersæ, subtus saturatiores sat conspersæ, linea exteriori rufescente-ochracea subtus fusca, margine exteriori angulato ; anticæ subfalcatae, linea interiori tenui subangulata, linea exteriori subarcuata ; posticæ linea exteriori recta.*

*Caberodes Phasianaria*, *Guen. Phal.* i. 140, 221, pl. 3, f. 10.

North America.

a. ——— ?

#### 10. CABERODES INTERLINEARIA.

*Mas.* *Ochraceo-alba ; alæ margine exteriori angulato ; anticæ lineis tribus, lineis interiori et media rectis obliquis, linea exteriori subflexuosa.*

*Caberodes interlinearia*, *Guen. Phal.* i. 140, 222.

New York.

#### South America.

#### 11. CABERODES CRAMERARIA.

*Mas.* *Pallidissime roseo-cinerea ; alæ linea exteriori obliqua subrecta ochracea extus albido marginata ; anticæ apice rectangulata, linea interiori nigricante arcuata intus albido marginata, margine exteriori angulato.*

*Caberodes Crameraria*, *Guen. Phal.* i. 139, 219.

Surinam.

#### 12. CABERODES ? ELDANABIA.

*Mas.* *Cervina, sat robusta ; palpi validi, oblique ascendentes, articulo 3o minimo ; antennæ late pectinatae ; pedes sat validi, tibiis posticis incrassatis ; alæ amplæ, nigro dense conspersæ, puncto discali nigro, linea exteriori ferruginea recta obliqua concisa extus albido marginata ; anticæ rectangulatae, linea interiori ferruginea gracili arcuata subangulata, guttis submarginalibus nigris, margine exteriori vix convexo ; posticæ margine exteriori rotundato.*

**Male.** Fawn-colour, rather robust. Palpi stout, obliquely ascending; third joint conical, very minute. Antennæ broadly pectinated; branches pubescent. Legs rather stout; hind tibiæ incrassated. Wings ample, thickly black-speckled, tinged with cinereous on the under side; discal point black; exterior line ferruginous, straight, oblique, concise, whitish-bordered on the outer side. Fore wings rectangular at the tips, with a slender curved slightly angular ferruginous interior line; a few black dots beyond the exterior line; exterior border hardly convex. Hind wings with the exterior border much rounded. Length of the body 7 lines; of the wings 17 lines.

a. Bogotá. From Mr. Stevens' collection.

### 13. CABERODES? CARCEARIA.

**Mas.** *Testaceo-cinerea; antennæ apices versus simplices; alæ nitentes, subtus pallide luteæ cinereo late marginatæ, linea exteriori ochracea recta obliqua distinctissima extus flavo marginata, margine exteriori vix flexo; anticæ apice rectangulatæ, linea interiori tenui valde angulata intus pallido marginata, puncto discali nigro.*

**Male.** Testaceous-cinereous. Antennæ simple for about one-third of the length from the tips. Wings shining, pale luteous and with a broad cinereous margin beneath, the latter appearing slightly above; exterior line ochraceous, straight, oblique, very distinct, yellow-bordered on the outer side; exterior border hardly bent. Fore wings rectangular at the tips, with a slight very acutely angular interior line which is pale-bordered on the inner side; discal point black. Length of the body 6 lines; of the wings 14 lines.

Rio Janeiro. In Mr. Fry's collection.

### Asia.

### 14. CABERODES ACHROMARIA.

**Fœm.** *Cinereo-alba; frons pallide fusca; alæ linea pallidiori intus subumbrata, puncto discali nigro, lineola marginali fusca; anticæ acutæ, linea interiori vix distincta, linea exteriori apud costam arcuata, margine exteriori vix flexo; posticæ rotundatæ, linea exteriori costam versus obsoleta.*

*Caberodes achromaria*, Guen. *Phal.* i. 136, 211.

North Hindostan.

## Genus 29. TETRACIS.

Corpus robustum. Frons non prominens. Proboscis longiuscula. Palpi sat validi, non longi, oblique ascendentes; articulus 3us minimus. Antennæ validae, filiformes, maris subpubescentes. Tibiæ posticæ fusiformes. Tarsi spinosi. Alæ amplæ, integræ, margine exteriori angulato, fimbria brevi; anticæ acutæ aut subfalcatæ; posticæ anguli lateribus subconcavis.

*Tetracis*, *Guen. Phal.* i. 140.

Body robust. Front not prominent. Proboscis rather long. Palpi rather stout, not long, obliquely ascending; third joint extremely minute. Antennæ stout, filiform, hardly pubescent in the male. Hind tibiæ fusiform; spurs moderately long; tarsi spinose. Wings ample, entire; exterior border angular; fringe short. Fore wings acute or subfalcate. Hind wings slightly excavated on each side of the angle.

## North America.

## A. Alæ anticæ unilineatæ.

A. Alæ anticæ linea obscura. : - - - *crocallata*, *Guen.*

B. Alæ anticæ linea pallida. - - - *aspilata*, *Guen.*

## B. Alæ anticæ bilineatæ.

A. Alæ anticæ nigro lineatæ. - - - *ægrotata*, *Guen.*

B. Alæ anticæ pallido lineatæ. - - - *Pandaria*, *Walk.*

C. Alæ anticæ trilineatæ. - - - *truxaliata*, *Guen.*

## 1. TETRACIS CROCALLATA.

*Late testacea; alæ subconspersæ; anticæ apice rectangulatæ, puncto discali nigro, linea exteriori obliqua lata recta concisa ferrugineo-fusca, margine exteriori angulato; posticæ linea exteriori tenui antice obsoleta.*

*Tetracis crocallata*, *Guen. Phal.* i. 141, 224.

a—f. Trenton Falls, New York. Presented by E. Doubleday, Esq.

g. Nova Scotia. From Lieut. Redman's collection.

h. Orilla, West Canada. From Mr. Bush's collection.

## 2. TETRACIS ASPILATA.

*Citrino-alba* ; palpi pedesque antici læte ochracei ; alæ elongatæ ; anticæ linea exteriori recta obliqua ochracea, margine exteriori valde angulato ; posticæ albæ.

*Tetracis aspilata*, Guen. *Phal.* i. 141, 225.

♂—♀. Trenton Falls, New York. Presented by E. Doubleday, Esq.

f. Nova. Scotia. From Lieut. Redman's collection.

## 3. TETRACIS ÆGROTATA.

*Mas.* Pallide carneo-ochracea ; alæ linea exteriori nigra tenui denticulata, umbra interiori indeterminata, margine exteriori angulato ; anticæ vix falcata, linea interiori denticulata.

*Tetracis ægrotata*, Guen. *Phal.* i. 141, 226.

California.

## 4. TETRACIS TRUXALIATA.

*Testacea* ; alæ margine exteriori angulato, anguli lateribus subconcavis ; anticæ subfalcata, lineis tribus fuscis, linea interiori subarcuata, linea exteriori subundulata bene determinata, linea submarginali angulata tenuissima.

*Tetracis truxaliata*, Guen. *Phal.* i. 142, 228, pl. 20, f. 9.

California.

## 5. TETRACIS PANDARIA.

*Mas.* Albida ; alæ latæ, vix testaceo tinctæ, atomis ochraceis subtilius bene determinatis, puncto disculi nigro, linea exteriori ochracea, lituris paucis submarginalibus fuscis, margine exteriori subangulato ; anticæ subfalcata, linea interiori tenui subarcuata, linea exteriori recta ; posticæ linea exteriori subarcuata.

*Male.* Whitish. Wings broad, very indistinctly testaceous-tinged, slightly speckled with ochraceous above, largely speckled beneath ; discal point black, distinct ; exterior line ochraceous ; a few irregular brown submarginal marks ; exterior border slightly

angular. Fore wings subfalcate, with an interior slender slightly and irregularly curved line; exterior line straight. Hind wings with the exterior line slightly curved. Length of the body 7 lines; of the wings 20 lines.

a. North America. From Mr. Dyson's collection.

### South America.

#### 6. TETRACIS COMMUNATA.

Mas. *Pallidissime ochraceo-flava; alæ subconspersæ, puncto discali nigro distincto, linea exteriori fusca; antica linea exteriori lata bene determinata; postica linea exteriori tenui pallidiori postice obsoleta.*

*Tetracis communata*, Guen. *Phal.* i. 141, 223.

Brazil.

### Australia.

#### 7. TETRACIS CACHEXIATA.

Fœm. *Sulphureo-alba; alæ antica linea exteriori recta obliqua tenui obscuriore apice obsoleta, puncto discali supra obsoleto subtus vix conspicuo, margine exteriori angulato; postica margine exteriori vix angulato.*

*Tetracis Cachexiata*, Guen. *Phal.* i. 140, 227.

Australia.

### Genus 30. ONYCODES.

Corpus vix robustum. Proboscis valida. Palpi brevissimi, gracillimi, disjuncti. Thorax angustus. Tibiæ non incrassatæ; calcaria brevia, spinis terminata. Alæ amplæ, rude strigatæ, lineis nullis distinctis, fimbria brevi; antica subfalcata, costa subconcava, angulo interiore rotundato; postica trigonæ, margine exteriori valde rotundato. Mas.—Antennæ longæ, pectinatæ, ramis longis contiguis decumbentibus. Fœm.—Antennæ dentibus pubescentibus. Abdomen postice tumidum.

*Onycodes*, Guen. *Phal.* i. 142.

Body hardly stout. Proboscis robust. Palpi very short, very slender, apart from each other. Thorax narrow. Tibiæ not incrassated; spurs short, terminated by a spine. Wings ample,

coarsely streaked, without distinct lines; fringe short. Fore wings subfalcate; costa slightly concave; interior angle rounded. Hind wings triangular, well-developed; exterior border wholly rounded. *Male*. — Antennæ long, pectinated; branches decumbent, long, slender, serried. *Female*. — Antennæ with pubescent teeth. Abdomen tumid hindward.

### 1. ONYCODES TRAUMATARIA.

*Saturate ochracea; alæ roseo suffusæ; anticæ linea exteriorē recta obliqua guttulari, lituris costalibus maculaque apud angulum interiorem nigris; posticæ linea exteriorē integra, lituris adhuc exterioribus lineaque submarginali.*

*Onycodes traumataria*, Guen. *Phal.* i. 143, 229, pl. 9, f. 8.

Australia?

### Genus 31. PRIONIA.

Corpus sat gracile. Frons plana, non producta. Palpi breves, tenues, porrecti, cylindrici, fere glabri; articuli bene determinati. Antennæ in utroque sexu pectinatæ, apice filiformes. Pedes graciles, nudi; tibiæ posticæ non incrassatæ; calcaria gracillima, approximata, inæqualia; tarsi inermes. Alæ oblongæ, integræ, lineis nullis distinctis; anticæ acutæ, marginis exterioris angulo valde obtuso; posticæ breves.

*Prionia*, Hübn. *Zutr. Exot. Schm.* Guen. *Phal.* i. 143.

Body rather slender. Front flat, not tufted. Palpi short, slender, porrect, cylindrical, almost bare; joints very distinct. Antennæ of both sexes pectinated, with filiform tips. Legs slender, bare; hind tibiæ not incrassated; spurs very slender, approximate, unequal; tarsi smooth. Wings oblong, entire, without distinct lines. Fore wings acute; exterior border very obtusely angular. Hind wings short.

### 1. PRIONIA SQUALIDARIA.

*Nigricante-fusca; alæ margine exteriorē subflexo; anticæ costam versus obscure cervinæ, lineis duabus nigris parallelis angulatis non obliquis; posticæ cervinæ, plaga apud angulum interiorem nigra.*

*Prionia sualidaria*, Hübn. Zutr. f. 787, 788. Guen. Phal. i. 144, 230.

Hindustan.

## 2. PRIONIA VIOLACEARIA.

**Mas.** *Cinerascens*; alæ subtus violaceo-rufescentes, angulis rotundatis, incisuris subobsoletis; anticæ violaceo-rufescente valde strigatæ et nebulosæ, basi maculisque duabus costalibus violaceo-fuscis; posticæ sordide fulvo-flavæ, apud angulum anteriorem vinoso-cinereæ, margine fimbriaque vinosis.

*Prionia violacearia*, Guen. Phal. i. 144, 231.

Hindustan.

## Genus 32. EURYMENE.

Corpus sat robustum. Frons plana, non producta. Palpi porrecti, sat validi, caput perparum superantes; articulus 3us conicus, minimus. Pedes graciles, glabri; tibiæ posticæ non incrassatæ, calcaribus gracilibus approximatis inequalibus; tarsi mutici. Alæ oblongæ, integræ, velutinæ, strigis transversis, margine exteriori postico excavato; anticæ apice rectangulatæ. **Mas.**—Antennæ pectinatæ, apice simplices. **Fem.**—Antennæ filiformes.

Plagodis, Hübn. Verz. Schm. 294.

Ennomos, p., Treit.; Boisd.

Eurymene, Dup. Lép. iv. 105; Steph.; Herr.-Sch.; Led. Z. B. V. W. iii. 205; Guen. i. 140.

Body rather stout. Front flat, not tufted. Palpi porrect, moderately stout, extending very little beyond the head; third joint conical, very minute. Antennæ moderately pectinated, and with simple tips in the male; filiform in the female. Legs slender, smooth; hind tibiæ not incrassated; spurs slender, approximate, unequal; tarsi unarmed. Wings oblong, entire, velvety, transversely strigated; exterior border excavated towards the interior angle. Fore wings rectangular at the tips.

## Europe.

### 1. EURYMENE DOLABRARIA.

*Albido-testacea*; alæ anticæ ferrugineo transversæ strigatæ, litura apud angulum anteriorem nigricante; posticæ apud angulum anteriorem nigricante notatæ.



- , *Sulz. Gesch.* 161, pl. 22, f. 9. *Sepp, Ins.* ii. pl. 15. *De Vill. Ent. Linn.* ii. 296, 408.
- Phalæna-Geometra dolabraria*, *Linn. Syst. Nat.* i. 2, 861, 207. *Gmel. ed. Syst. Nat.* i. 5, 2451, 207.
- Phalæna dolabraria*, *Fabr. Sp. Ins.* ii. 245, 21; *Mant. Ins.* ii. 187, 26; *Ent. Syst.* iii. 2, 138, 32. *Schr. Faun. Boic.* ii. 2, 18, 1635. *Lang. Verz.* ii. 170, 1192. *Naturf.* xi. 69, 22. *Donov. Brit. Ins.* x. pl. 349, f. 1.
- Geometra dolabraria*, *Wien. Verz.* 104, 16. *Brahm, Ins.* ii. 1, 498, 356. *Schwarz, Beytr.* 160, pl. 21, f. 3, 4. *Götze, Ent. Beytr.* iii. 3, 291, 207. *Panz. Faun.* 23. *Bork. Eur. Schm.* v. 137, 57. *Esp. Schm.* v. 80, pl. 15, f. 1, 2. *Ill. N. Ausg. dess.* i. 412, 16, *Fuessl. Schw. Ins.* 39, 758, *Hübner. Geom.* pl. 8, f. 42.
- Phalæna ustularia*, *Berl. Mag.* iv. 5, 516, 22.
- Enomus dolabraria*, *Treit. Schm.* vi. 1, 38, 18. *Boisd. Ind.* 182, 1438.
- Plagodis dolabraria*, *Hübner. Verz. Schm.* 294, 2848.
- Eurymene dolabraria*, *Dup. Lép.* iv. 187, pl. 148, f. 5. *Steph. Ill. Brit. Haust.* iii. 205. *Herr.-Sch. Schm. Eur.* iii. 55, 143. *Guen. Phal.* i. 145, 232. *Staint. Man.* ii. 11.
- g. England. From Mr. Stephens' collection.
- i. England. From Mr. King's collection.
- m. England.
- p. Europe. From M. Becker's collection.

## 2. EURYMENE FERVIDARIA.

*Lutescens*; *ala nigro substrigata, linea exteriori undulata nigra; antice puncto discali nigro, plaga exteriori purpurascens apud marginem interiorem, angulo rotundato incisuraque postica; postica linea antice obsoleta, strigis apud angulum interiorem nigris.*

*Eurymene fervidaria*, *Herr.-Sch. Exot. Schm.* f, 203.

*Plagodes fervidaria*, *Herr.-Sch. Exot. Schm.* 41.

*Eurymene emargutaria*, *Guen. Phal.* i. 145, 233.

North America.

## 3. EURYMENE PHLOGOSARIA.

*Pallide ochracea; ala linea exteriori obliqua nigricante, via undulata extus albido marginata; antice linea interiori sub-*



## Europe.

## 1. PERICALLIA SYRINGARIA.

*Cecina*; alæ purpurascente pallido subtinctæ, linea perobliqua nigro-fusca, extus lutescentes; antica linea antice abbreviata lineaque brevi adhuc exteriori angulum peracutum fingentibus, punctis interioribus nigris, linea strigisque costalibus albis; postica linea 2a e punctis albis.

———, *Roës, Ins. i. 3, pl. 10. Geoff. Ins. ii. 126, 32. Wilk. Pap. pl. 82. DeVill. Ent. Linn. ii. 296, 407.*

*Malena-Geometra Syringaria, Linn. Syst. Nat. i. 2, 860, 206.*

*Gmel. ed. Syst. Nat. i. 6, 2450, 206. Sepp, Ins. ii. pl. 7, Malena Syringaria, Fabr. Sp. Ins. ii. 244, 17; Mant. Ins. ii. 186, 20; Ent. Syst. iii. 2, 136, 25.*

*Geometra Syringaria, Wien. Verz. 103, 8. Brahm, Ins. ii. 1, 370, 247; 533, 390. Schr. Faun. Boic. ii. 2, 14, 1628. Lang. Verz. ii. 168, 1175, Naturf. vii. 128. Gölze, Ent. Beytr. iii. 3, 290, 206. Schwarz, Ins. i. 310, 309. Borkh. Eur. Schm. v. 112, 46. Esp. Schm. v. 62, pl. 11, f. 3—7. Ill. N. Ausg. dess. i. 407, 8. Fuessl. Schw. Ins. 39, 757. Hübn. Geom. pl. 6, f. 29. Haw. Lep. Brit. 293.*

*Hygrochroa Syringaria, Hübn. Verz. Schm. 293, 2859.*

*Enomos Syringaria, Treit. Schm. vi. 1, 52, 21. Dup. Lép. iv. 161, pl. 144, f. 5. Boisd. Ind. 182, 1437.*

*Pericallia Syringaria, Steph. Ill. Brit. Haust. iii. 171. Guen. Phal. i. 148, 236. Staint. Man. ii. 12.*

*Idenia Syringaria, Herr.-Sch. Eur. Schm. iii. 47, 124.*

*g. England. From Mr. Stephens' collection.*

*h. England. From Mr. King's collection.*

*i. England.*

*j, k. Europe. From M. Becker's collection.*

*l, m. Europe.*

## 2. PERICALLIA? FREITAGARIA.

*Cinerea*; antennæ maris subcrenulatæ, scæm. filiformes; alæ antica emarginatæ, limbo præcipue anteriore fasciæque fusco-cinereis, macula reniformi; postica subrotundatæ, pallide luteæ, striga maculisque obscurioribus.

*Pericallia Freitagaria, Moeschler, Ent. Zeit. Stett. xv. (1854) 144.*

*South Russia.*

## South America.

## 3. PERICALLIA OLIVINARIA.

**Mas.** *Saturate cinereo-olivaceæ; alæ nigro strigatæ, virentiore nigra; anticae plaga costali exteriori cinerea, linea arcuata albo marginata apud costam furcata, virentiore flexa lunulaque discali nigris; posticae lineolata.*

*Hygrochroma Olivinaria, Herr.-Sch. Exot. Schm. f. 306.*

*Pericallia Olivinaria, Guen. Phal. i. 148, 237.*

Brazil.

## Genus 34. EROSINA.

Corpus sat robustum. Proboscis longa, valida. Palpi breves, caput perpaullo superantes; articuli distincti, in utroque sexu simplices. Thorax brevis, subvillosus. Abdomen conicum, fasciculo apicali quadrato. Pedes sat robusti; tibiae non incrassatae, tarsi spinosi. Alæ ample, sericeae, integre; anticae subfalcatae; posticae breves, rotundatae.

*Erosina, Guen. Phal. i. 149.*

Body rather stout. Proboscis long, stout. Palpi short, extending but little beyond the head; joints distinct. Antennae filiform and simple in both sexes. Thorax short, slightly hairy. Abdomen conical, terminated in both sexes by a quadrate apical fascicle. Legs rather robust; hind tibiae not incrassated; spurs on tarsi spinose. Wings ample, smooth, silky, shining, entire. Fore wings short. Fore wings subfalcate. Hind wings short, rounded.

## 1. EROSINA HYBERNIATA.

**Mas et form.** *Pallide straminea; alæ rufescente tinctae, exteriori tenui cinerea undata dentata extus pallido punctata, puncto discali; anticae linea interiori subobscure flexa; pedes vinoso fuscæ, femoribus pallidis.*

*Erosina hybernata, Guen. Phal. i. 149, 238, pl. 6, f. 7.*

Brazil.

## Genus 35. SELENIA.

Corpus gracile. Fasciculus frontalis acutus, declivis. Proboscis brevissima, gracillima. Palpi lati, rostriformes, caput superantes; articulus 3us minimus. Antennæ maris pectinatæ, feminae simplices. Thorax dense vestitus. Pedes glabri, validi; tibiæ non incrassatæ; tarsi robusti. Alæ amplæ, oblongæ; anticæ margine exteriori valde angulato; posticæ margine exteriori plus minusve dentato.

Selenia, Hübn. Verz. Schm. 292; Herr.-Sch.; Guen. Phal. i. 150; Led. Z. B. V. W. iii. 204.

Ennomos, p., Treit.; Dup.; Boisd.

Geometra, Steph.

Body slender. Frontal tuft prolonged, acute, declining. Proboscis very short and slender. Palpi broad, rostriform, extending beyond the head; third joint acute, very minute. Antennæ moderately pectinated to the tips in the male, simple in the female. Thorax densely clothed. Legs smooth, stout; tibiæ not incrassated; spurs equal, moderately long; tarsi robust. Wings ample, oblong; fringe short. Fore wings with the exterior border very angular. Hind wings with the exterior border more or less dentate.

## 1. SELENIA ILLUNARIA.

*Pallide ochracea; alæ ferrugineo conspersæ; anticæ apud costam albidæ, lineis tribus subparallelis ferrugineis apud costam dilatatis, margine exteriori postico excavato; posticæ lineis subobsoletis, margine exteriori postico subdentato.*

———, Albin, Ins. pl. 42, f. 68. Sepp, Ins. i. pl. 2, f. 4—8.

Geometra lunaria, var., Wien. Verz. 282. Ill. N. Ausg. dess. i. 401, 7. Bork. Eur. Schm. v. 103, 45, var. 2—4. Lang. Verz. ii. 168, 1181; 169, 1183. Schw. Beytr. 124, pl. 18, f. 3, 7, 8, 11.

Geometra bilunaria, Esp. Schm. v. 73, pl. 13, f. 1—10.

Geometra illunaria, Esp. Schm. v. 76, pl. 14, f. 1—5. Hübn. Geom. pl. 7, f. 36, 37. Haw. Lep. Brit. 292. Steph. Ill. Brit. Haust. iii. 168.

Geometra unilunaria, Esp. Schm. v. 77, pl. 14, f. 6—8.

Geometra fulvolunaria, Esp. Schm. v. 78, pl. 14, f. 9.

*Selenia illunaria*, Hübn. Verz. Schm. 292, 2835. Herr.-Sch. Ent. Schm. iii. 47, 123. Guen. Phal. i. 152, 239. Staint. Mant. ii. 12.

*Ennomos illunaria*, Treit. Schm. vi. 1, 61, 23. Dup. Lép. iv. 153, pl. 145, f. 1, 2. Boisd. Ind. 183, 1448.

*Geometra ustularia*, Don. Brit. Lep. iii. pl. 82.

*Geometra Juliaria*, Haw. Lep. Brit. 293. Steph. Ill. Brit. Haust. iii. 168, 12.

*a—u.* England. From Mr. Stephens' collection.

*w—gg.* Europe. From M. Becker's collection.

## 2. SELENIA LUNARIA.

*Albido-ochracea*; *alæ nigro conspersæ, ferrugineo ex parte suffusæ, antica subfulcatæ, lunula discali vitrea, lineis tribus ferrugineis, 1a arcuata, 2a 3aque apud costam approximatis, papicali ferruginea, margine exteriori fæminæ dentato; posticæ lineis tribus approximatis, margine exteriori fæminæ valde dentato.*

———, Albin, Ins. pl. 42, f. 69. Wilk. Pap. 83. DeMeun. Ent. Linn. ii. 300, 416. Sepp, Ins. iii. pl. 21, f. 1—6.

*Phalæna lunaria*, Fabr. Sp. Ins. ii. 245, 18; Mant. Ins. ii. 186, 11. Ent. Syst. iii. 2, 136, 26.

*Phalæna-Geometra lunaria*, Gmel. ed. Syst. Nat. i. 5, 2451. 607.

*Geometra lunaria*, Wien. Verz. 103, 7, var. 1, 6. Ill. N. Aug. dess. i. 401, 7. Bork. Eur. Schm. v. 101, 45, var. 1, 8. Ent. Schm. v. 66, pl. 12, f. 1—4. Schr. Faun. Boic. ii. 2, 13, 163. Götze, Ent. Beytr. iii. 3, 394, 137. Brahm, Ins. ii. 311, 185, 529, 587. Schwarz, Ins. ii. 139, 142, pl. 19, f. 3—7. Don. Brit. Lep. iv. pl. 132. Hübn. Geom. pl. 7, f. 33; pl. 8, f. 451. Haw. Lep. Brit. 292. Steph. Ill. Brit. Haust. iii. 169, 13.

*Selenia lunaria*, Hübn. Verz. Schm. 292, 2836. Herr.-Sch. Ent. Schm. iii. 47, 121. Guen. Phal. i. 153, 240. Staint. Mant. ii. 13.

*Ennomos lunaria*, Treit. Schm. vi. 1, 56, 22. Dup. Lép. iv. 153, pl. 144, f. 1, 2. Boisd. Ind. 183, 1446.

*Geometra delunaria*, Steph. Ill. Brit. Haust. iii. 170, 14.

*Geometra sublunaria*, Steph. Ill. Brit. Haust. iii. 170, 15.

*Geometra delunaria*, Hübn. Geom. pl. 7, f. 34.

*Selenia delunaria*, *Hübner. Verz. Schm.* 293, 2837. *Herr.-Sch. Eur. Schm.* iii 47, 122.

*Enomus delunaria*, *Boisd. Ind.* 183, 1447.

c—j. England. From Mr. Stephens' collection.

k—r. England.

s, t. Europe. From M. Becker's collection.

u. Ukraine. Presented by Dr. Dowler.

### 3. SELENIA ILLUSTRARIA.

*Purpureo-ochracea*; *alæ nigro conspersæ, olivaceo ex parte tinctæ, macula discali submarginali fimbriæque nigricantibus; antica subfalcata, lunula discali vitrea, lineis tribus undulatis, 1a 2aque latis ferrugineis, 3a tenui nigra, plaga apicali ferruginea, margine exteriori subdentato; postica trilineata, margine exteriori valde dentato.*

———, *Albin, Ins. pl.* 95, f. a—d. *Sepp, Ins. iii. pl.* 42.

*Geometra lunaria*, *Wien. Verz.* 283, var. 5. *Ill. N. Ausg. dess. i.*

401, 7. *Bork. Eur. Schm. v.* 105, 45, var. 5—7. *Schwarz,*

*Beytr.* 147, pl. 20, A, f. 3, 4. *Hübner. Geom. pl.* 7, f. 35.

*Steph. Ill. Brit. Haust. iii.* 179, 16.

*Geometra quadrilunaria*, *Esp. Schm. v.* 72, pl. 12, f. 5, 6.

*Geometra Phœbearia*, *Schr. Faun. Boic. ii.* 2, 13, 1627.

*Geometra tetralunaria*, *Berl. Mag. iv.* 5, 506, 3. *Naturf. xi.* 64, 3.

*Gölze, Ent. Beytr.* 3, 368, 27.

*Selenia illustraria*, *Hübner. Verz. Schm.* 293, 2838. *Herr.-Sch.*

*Eur. Schm. iii.* 47, 120. *Guen. Phal. i.* 154, 241. *Staint.*

*Men. ii.* 13.

*Enomus illustraria*, *Treit. Schm. vi.* 1, 63, 24. *Dup. Léop. iv.* 159,

pl. 144, f. 4; pl. 145, f. 2. *Boisd. Ind.* 183, 1449.

c—h. England. From Mr. Stephens' collection.

i. England. From Mr. Bouchard's collection.

k—p. England.

q. Europe. From M. Becker's collection.

r. Europe.

### North America,

#### 4. SELENIA ÆSIONARIA.

*Max. Albido-ochracea*; *alæ nigricante conspersæ, linea exteriori fusca subundulata extus diffusa, spatio marginali purpura-*

*scente, marginis exterioris angulo valde dilatato ; anticæ lineæ interiore fusca subundulata subangulata intus diffusa, lunula discali nigricante, lineæ exterioris flexura marginem fere attingente ; posticæ puncto discali fusco.*

*Male.* Whitish ochraceous, darker beneath. Palpi extending a little beyond the head ; third joint conical, very minute. Wings thinly blackish-speckled ; exterior line brown, slightly undulating, diffuse on the outer side ; space between it and the exterior border purplish-tinged ; exterior border forming a much rounded angle. Fore wings rectangular at the tips ; interior line brown, slightly undulating and angular, diffuse on the inner side ; discal lunule blackish ; exterior line forming an extremely deep bend opposite the angle. Hind wings with a brown discal point ; exterior border excavated on each side of the angle. Length of the body 6 lines ; of the wings 18 lines.

This species is most allied to *Selenia*, but has also some affinity to *Eurymene* and to *Azelina* ; the latter genus and *Selenia* appear to form one group and to include several sections, which, with one exception, are all peculiar to America.

a. New York. Presented by E. Doubleday, Esq.

##### 5. SELENIA ALOIPHEARIA.

*Mas.* *Cinerea ; alæ ferrugineo conspersæ, ochraceo tinctæ, litura discali diffusa indistincta ; anticæ lineis tribus fuscis subparallelis apud costam dilatatis, marginis exterioris angulo rotundato ; posticæ linea una diffusa, margine exteriori vix dentato, punctis submarginalibus nigris ; anticæ subfulcatæ, biangulatæ ; posticæ angulatæ, dentatæ.*

*Male.* Cinereous. Palpi extending beyond the head. Wings ferruginous-speckled, ochraceous-tinged ; these two colours more prevalent and of a brighter hue on the under side ; discal mark diffuse, indistinct. Fore wings rectangular at the tips, with three brown oblique nearly parallel lines, which are dilated on the costa ; exterior border forming a distinct but rounded angle, behind which it is slightly excavated. Hind wings with one diffuse line ; exterior border hardly dentate. Length of the body 6 lines ; of the wings 18 lines.

a. New York. Presented by E. Doubleday, Esq.



## New Zealand.

## 6. SELENIA GALLARIA.

**Fœm.** *Albido-testacea*; palpi caput longe superantes; alæ ochraceo subconspersæ et trilineatæ, linea 1a angulosa, 2a undulata indistincta, 3a concisa viz undulata extus albido marginata, spatio marginali purpurascente-ochraceo, venis lineaque marginali albidis.

**Female.** Whitish testaceous. Palpi extending far beyond the head. Wings slightly and minutely ochraceous-speckled, with three ochraceous lines; first line zigzag; second undulating, indistinct; third concise, hardly undulating, bordered with whitish on the outer side; space between it and the exterior border ochraceous, purplish-tinged, with whitish veins and with black submarginal points; marginal line whitish: exterior border acutely angular. Fore wings with an angle between the middle angle and the tips, which are subfalcate; first and second lines dilated by the costa; a deeper ochraceous spot near the interior angle. Hind wings slightly dentated. Length of the body 6 lines; of the wings 16 lines.

α New Zealand. From Mr. Earl's collection.

## Genus 36. AZELINA.

**Corpus robustum.** Fasciculus frontalis sæpissime productus. Proboscis robusta. Palpi validi, porrecti, caput perpauilo superantes; articulus 3us conicus, minimus. Antennæ variæ. Pedes robusti; tibiæ non incrassatæ; tarsi subspinosi. Alæ amplæ; antice margine exteriore sæpissime biangulato; posticæ margine exteriori dentato aut fere integro.

Gonodontis, p., *Hübner. Verz. Schm.*

*Azelina*, *Guen. Phal.* i. 156.

**Body stout.** Frontal tuft generally prominent. Proboscis robust. Palpi stout, porrect, extending but little beyond the head; third joint conical, very minute. Antennæ variable. Legs robust; tibiæ not incrassated; spurs moderately long; tarsi minutely spinose. Wings stout, ample. Fore wings generally acute, and with two prominent teeth. Hind wings with the exterior border angular or dentate, or almost entire.

## North America.

- A. Alæ anticæ lunula albida. - - - Hubneraria, *Guen.*  
 B. Alæ anticæ lunula nulla albida.  
   A. Alæ posticæ trifasciatæ. - - - - - peplaria, *Hüb.*  
   B. Alæ posticæ non trifasciatæ.  
     A. Alæ albidæ. - - - - - Neonaria, *Walk.*  
     B. Alæ fuscescente-cinereæ. - - - Zalissaria, *Walk.*

## 1. AZELINA HUBNERARIA.

*Ferrugineo-cinerea; alæ lunula discali albida, margine exteriori subintegro; anticæ lineis duabus nigris, 1a costam versus flexu extus diffusa, 2a undulata intus diffusa, linea submarginali albida angulosa, puncto submarginali nigro; posticæ linea tenui undulata fusca extus albido marginata, punctis marginalibus nigris.*

Gonodontis ancetaria, *Hüb. Samml. Exot. Schm. ii. Lep. v. Geom. i. Amplæ, iii. Eusareæ, A. Capaces, 3, f. 1—4.*  
 Azelina Hubneraria, *Guen. Phal. i. 159, 249.*

a—e. New York. Presented by E. Doubleday, Esq.

## 2. AZELINA? PEPLARIA.

*Fœm. Fusca; alæ anticæ plumbeo-cinereæ, fascia obliqua post-media angulata cana, apices versus plumbeo-canæ; posticæ pallidiores, fasciis tribus cinereis, apices versus plumbeo-canæ.*

Gonodontis peplaria (*Geometra ampla, Eusarea capax*), *Geyer, Zutr. Samml. Exot. Schm. 27, 355, f. 709, 710.*

North America.

## 3. AZELINA NEONARIA.

*Mas. Albida; palpi oblique ascendentes; antennæ subpectinatae; alæ ochraceo conspersæ, puncto discali distincto, linea exteriori ochracea undulata, spatio marginali purpurascens tincto, marginis exterioris angulo rotundato; anticæ apud apices albido notatæ, linea interiori angulata diffusa, linea exteriori valde flexa, guttis posticis submarginalibus nigris.*

**Male.** Whitish. Palpi obliquely ascending; third joint conical, very minute. Antennæ slightly pectinated. Wings thickly and transversely ochraceous-speckled; discal point distinct; exterior line ochraceous, undulating; space between it and the exterior border purplish-tinged; exterior border forming a much rounded angle. Fore wings rectangular at the tips, the latter with some whitish marks; interior line angular, diffuse; exterior line forming a deep band opposite the angle, with three black dots between its hind part and the border. Hind wings with the exterior border excavated on each side of the angle. Length of the body 5 lines; of the wings 16 lines.

a. North America.

#### 4. AZELLINA? ZALISSARIA.

**Mas.** *Fuscescente-cinerea; fasciculus frontalis porrectus; antennæ pectinatæ, apice simplices; thorax subcristatus; alæ nigro subconspersæ; anticæ subfalcatae, linea exteriori recta obliqua nigricante-fusca extus concisa intus diffusa, striga costali obliqua nigro-fusca, margine exteriori biangulato; posticæ linea tenui antice obsoleta, punctis duobus posticis submarginalibus nigris, margine exteriori angulato.*

**Male.** Brownish cinereous. Frontal tuft prominent. Third joint of the palpi very minute. Antennæ moderately pectinated, simple towards the tips. Thorax slightly crested. Abdomen extending beyond the hind wings. Wings slightly and minutely speckled with black. Fore wings subfalcate, with a straight oblique blackish brown exterior line, which is concise on the outer side, but very diffuse on the inner side; a blackish brown streak extending obliquely outward to the disk from the basal part of the costa; exterior border with two slight angles. Hind wings with a slight line which corresponds to the line of the fore wings, and is obsolete in front; exterior border distinctly angular, with two hindward submarginal black points. Length of the body 7 lines; of the wings 15 lines.

a. East Florida. Presented by E. Doubleday, Esq.

## West Indies.

## 5. AZELINA? NERISARIA.

**Mas.** *Cinereo-cervina*; *palpi subangulati*; *alæ anticæ apice rectangulatæ, nigro subconsersæ, linea exteriori recta obliqua nigricante extus pallido marginata, striga costali obliqua nigricante, margine exteriori angulato*; *posticæ linea tenaxi, margine exteriori vix angulato*.

**Female.** Cinereous fawn-colour. Palpi rising obliquely as high as the vertex; third joint very minute, forming an angle with the second. Fore wings rectangular at the tips, thinly and minutely speckled with black, irregularly darker about the exterior border; exterior line slender, straight, oblique, blackish, pale-bordered on the outer side; a blackish streak extending obliquely outward from the middle of the costa; exterior border forming an angle before the middle, its hind part much rounded. Hind wings with a line like that of the fore wings but more slender; exterior border hardly angular. Length of the body  $5\frac{1}{2}$  lines; of the wings 16 lines.

**a.** St. Domingo. From Mr. Tweedie's collection.

## South America.

**A.** *Alæ anticæ puncto discali vitreo.*

**A.** *Alæ non rufescente-carnæ.*

**A.** *Alæ posticæ macula nulla fulvescente.* - *lustraria, Guen.*

**B.** *Alæ posticæ macula fulvescente.* - *rapinaria, Guen.*

**B.** *Alæ rufescente-carnæ.* - *stuposaria, Guen.*

**B.** *Alæ anticæ striga discali semihyalina.* - *hædularia, Guen.*

**C.** *Alæ anticæ lunula discali vitrea.* - *Anceta, Cram.*

**D.** *Alæ anticæ litura nulla vitrea.*

**A.** *Abdomen basi non nigrum.*

**A.** *Venæ pallido non punctatæ.*

**a.** *Alæ anticæ macula subtus nulla alba.*

**i.** *Alæ viridi non variæ.*

**\*** *Alæ punctis nullis submarginalibus.*

**†** *Alæ posticæ non nigro-fuscæ.*

**‡** *Alæ anticæ lituris nullis cuneatis.*

*rectisectaria, Herr.-Sch.*

**‡‡** *Alæ anticæ lituris cuneatis.*

*pouphilaria, Guen.*

- †† Alæ posticæ nigro-fuscæ. - stolidata, *Guen.*  
 \*\* Alæ punctis submarginalibus.  
   † Alæ macula discali. - Asilasaria, *Walk.*  
   †† Alæ macula nulla discali.  
     † Alæ glauco-cinereæ. campinaria, *Guen.*  
     †† Alæ testaceo-cinereæ.  
       imperfectaria, *Guen.*  
     ††† Alæ fuscescente-cinereæ.  
       Amyclaria, *Walk.*  
     †††† Alæ flavescente-testaceæ.  
       repellaria, *Guen.*  
     ††††† Alæ ochraceo-flavæ. crocullaria, *Guen.*  
 ii. Alæ viridi variæ.  
   \* Alæ anticæ lateritiæ. - speciosata, *Guen.*  
   \*\* Alæ anticæ non lateritiæ.  
     † Antennæ maris simplices. habenaria, *Guen.*  
     †† Antennæ maris pectinatæ.  
       gonopteraria, *Guen.*  
   b. Alæ anticæ macula subtus alba. - cavinata, *Guen.*  
   n. Venæ pallido punctatæ. - - - latrata, *Guen.*  
   B. Abdomen basi nigrum. - - - xylitaria, *Guen.*

## 6. AZELINA LUSTRARIA.

**Mas.** Olivaceo-cinerea; antennæ filiformes, fasciculis parvis disjunctis; alæ angulatæ, rufescente-ferrugineo tinctæ, linea exteriori tenui undulata alba; anticæ costa strigata, puncto discali vitreo, lituris duabus marginalibus pallidis, linea intus fusco late marginata; posticæ non dentatæ.

*Azelina lustraria*, *Guen. Phal. i. 156, 242.*

Brazil.

## 7. AZELINA RAPINARIA.

**Mas.** Fusco-cinerea, antennæ valde pectinatæ; alæ carneo suffusæ, linea exteriori pallida fasciaque diffusa fusca contiguæ; anticæ tridentatæ, puncto discali vitreo, linea flexa; posticæ fascia ex parte obsoleta, macula apud angulum interiorem fulvescente.

*Azelina rapinaria*, *Guen. Phal. i. 157, 243.*

Brazil.

## 8. AZELINA RECTISECTARIA.

*Cinereo-fusca ; alæ linea exteriori obliqua subrecta albida ; anticæ lineis duabus interioribus flexis nigris, fascia exteriori fusca lata intus diffusa, striga antica submarginali pallida, margine exteriori bidentato ; posticæ litura apud angulum interiorem pallida nigro signata.*

*Gonodontis rectisectaria, Herr.-Sch. Exot. Schm. pl. 58, f. 325.*

*Azelina rectisectaria, Guen. Phal. i. 157, 243.*

Brazil.

## 9. AZELINA CAMPINARIA.

*Mas. Glauco-cinerea ; alæ linea exteriori nigricante subrecta extus albido marginata, margine exteriori vix flexo ; anticæ acutæ, striga costali brevi obliqua, lineola subapicali e punctis albis nigro signatis ; posticæ punctis duobus albidis apud angulum interiorem.*

*Gonodontis campinaria, Herr.-Sch. Exot. Schm. pl. 79, f. 458.*

*Azelina campinaria, Guen. Phal. i. 157, 244.*

Brazil.

## 10. AZELINA STOLIDATA.

*Mas. Saturate fusca ; alæ anticæ acutæ, basi et apud costam carneo suffusæ, linea exteriori pallida flexa, spatio marginali obscure carneo strigis fuscis, umbra apicali nigricante, costa subtruncata, margine angulato incisuris duabus ; posticæ nigro-fusca, linea tenui tincturisque carneis.*

*Azelina stolidata, Guen. Phal. i. 158, 246.*

Colombia.

## AZELINA HÆDULARIA.

*Mas et fœm. Pallide rufescente-testacea ; antennæ simplices, viz pubescentes ; alæ inæqualiter dentatæ ; anticæ nigricante strigatæ et nebulosæ, lineis duabus dentatis bene determinatis valde sinuatis, 1a atro umbrata, 2a intus nigro fusciscente late marginata, striga discali alba semihyalina, punctis quinque submarginalibus albis ; posticæ nigricantes, basi margineque testaceis, linea pallida obliqua inæquali, punctis tribus marginalibus posticis nigris.*

*Azelina hœdularia*, *Guen. Phal.* i. 158, 247.

Brazil.

## 12. AZELINA ANCETA.

*Cinereo-fusca* ; *alæ anticæ valde angulatæ, luna discali vitrea, lineis duabus atris, 1a denticulata intus albo marginata, 2a antice denticulata postice subundulata intus diffusa extus albo marginata, lineis duabus submarginalibus nigricantibus apud costam approximatis, 1a integra, 2a postice abbreviata ; posticæ linea submarginali subdenticulata extus albo marginata.*

*Phalæna-Geometra Anceta*, *Cram. Pap. Exot.* iv. 136, pl. 360, f. C, D.

*Azelina Aucetaria*, *Guen. Phal.* i. 158, 248.

Surinam.

a. Guayaquil. Presented by Dr. Hooker.

## 13. AZELINA SPECIOSATA.

*Mas. Viridescente-ochracea ; thorax viridescente-cinereus, cristis carneo-rufis ; alæ anticæ inæqualiter dentatæ, lineis duabus dentatis nigris, spatio intermedio incarnato nigro-strigato ; posticæ pallide lateritiæ, strigatæ, æqualiter dentatæ, dimidio antico subolivaces, margine interiore ochraceo.*

*Azelina speciosata*, *Guen. Phal.* i. 159, 250.

Colombia.

## 14. AZELINA HABENARIA.

*Mas et fœm. Violaceo-cinerea ; antennæ simplices non pubescentes ; alæ dentatæ ; anticæ lineis duabus remotis, 2a obliqua undulata subviridescente ochraceo ex parte marginata, costa inter lineas pallide ochraceo-flava, puncto discali nigro ; posticæ unilineatæ, apud marginem interiorem rufescente tinctæ.*

*Azelina habenaria*, *Guen. Phal.* i. 159, 251.

Brazil.

## 15. AZELINA STUPOSARIA.

**Fœm.** *Rufescente-carnea ; alæ strigatæ, intus rufo extus olivaceo tinctæ ; anticæ dentatæ et incisæ, linea interiore ferrugineo-fusca tridentata, linea exterior subangulata intus diffusa, puncto discali vitreo, spatio marginali pallido nebulosa ; posticæ linea sinuata, costa interiore cinerea.*

*Azelina stuposaria, Guen. Phal. i. 160, 252.*

**Brazil.**

## 16. AZELINA GONOPTERARIA.

**Mas et fœm.** *Pallide olivaceo-viridis ; antennæ maris pectinatae, apice simplices ; alæ anticæ angulis tribus bene determinatis, lineis duabus sat approximatis, 1a tenui nigricante tridentata cinerascens marginata, 2a fusca obliqua subrecta concisa duplicata intus rufescente et olivaceo marginata, punctis exterioribus nigris ; posticæ olivaceo-cinereæ, angulatæ, subdentatæ, linea subrecta vix conspicua, punctis marginalibus.*

*Azelina gonopteraria, Guen. Phal. i. 160, 253, pl. 6, f. 5.*

**Brazil.**

## 17. AZELINA REPELLARIA.

**Fœm.** *Fluorescente-testacea ; alæ nigricante conspersæ, punctis marginalibus nigris ; anticæ tridentatæ, linea 1a tenui indistincta tridentata, 2a violaceo-fusca subrecta bene determinata, linea intermedia diffusa nigricante, punctis submarginalibus duobusque discalibus nigris ; posticæ linea recta diffusa.*

*Azelina repellaria, Guen. Phal. i. 161, 254.*

**Brazil.**

## 18. AZELINA IMPERFECTARIA.

**Mas et fœm.** *Testaceo-cinerea ; antennæ simplices, pubescentes ; alæ subconspersæ, lineis venis ex parte fimbriaque rufescente tinctis, punctis marginalibus nigris ; anticæ lineis duabus rectis obliquis obscuris, puncto discali nigricante ; posticæ subintegre, linea una indistincta.*

*Azelina imperfectaria, Guen. Phal. i. 161, 255.*

**Brazil.**



## 19. AZELINA POAPHILARIA.

*Rufescenti-cinerea; alæ subintegræ, nigricante subconspersæ, punctis submarginalibus fuscis; antica acutæ, linea exteriori vix arcuata extus punctis marginata dentibusque tribus interioribus nigris; postica linea exteriori vix arcuata pallida.*

*Azelina poaphilaria*, Guen. *Phal.* i. 161, 256, pl. 4, f. 5.

Brazil.

## 20. AZELINA CROCALLARIA.

*Mas. Pallide ochraceo-flava; antennæ pubescentes, ciliis fasciculatis; alæ ferrugineo strigatæ, lineis duabus saturate fuscis extus cinerascens marginatis, 1a subundata non obliqua, 2a obliqua subrecta, macula discali punctisque submarginalibus nigris cinereo notatis, margine exteriori triangulato; postica pallidiores, rotundatæ, marginatæ, macula discali nigra, linea exteriori nigricante.*

*Azelina crocallaria*, Guen. *Phal.* i. 162, 257.

Brazil.

## 21. AZELINA XYLINARIA.

*Mas. Ochraceo-alba; antennæ pubescentes, ciliis fasciculatis; tegula apice & abdomen basi nigricantia; alæ dentatæ, ex parte fusco tinctæ nigroque conspersæ, linea exteriori subdenticulata punctisque marginalibus nigris; antica linea flexa intus fusco marginata, strigis submarginalibus badiis; postica spatium interiore nigro-conspurcato, atomis submarginalibus badiis.*

*Azelina xylitaria*, Guen. *Phal.* i. 162, 258.

Brazil.

## 22. AZELINA LATRATA.

*Mas et fem. Viridescens-cervina; alæ nitentes, lineis duabus sinuatis indistinctis remotis obscuris, punctis apud venas flavescens-albis, macula discali rotunda pallida punctum nigricans includente; antica acutæ, margine exteriori unidentato postice inciso; postica dentatæ, linea arcuata nigricante, fimbria ex parte carneo-alba.*

*Azelina latrata*, Guen. *Phal.* i. 163, 259.

Colombia. Brazil.

## 23. AZELINA CANINATA.

**Mas.** *Pallide violaceo-cinerea ; alæ apud marginem exteriorem viridescens-rufescentes ; anticæ atomis nonnullis nigris, lituris tribus costalibus, macula subtus alba ovali submarginali ; posticæ puncto subtus discali nigro.*

*Azelina caninata*, Guen. *Phal.* i. 163, 260.

Colombia.

## 24. AZELINA ASILASARIA.

**Mas.** *Albida ; antennæ pubescentes ; alæ ochraceo fuscoque variæ, linea interiore nigricante incompleta undulata, linea media indistincta denticulata, linea submarginali albida angulosa punctisque nigris contiguis, macula maxima discali pallida nigro marginata punctumque nigrum includente ; anticæ subfalcatae, puncto discali interiore nigricante albido marginata, spatio marginali ex parte nigricante-fusco, margine exteriore angulato ; posticæ dentatae, linea media postice duplicata distinctissima.*

**Male.** Whitish. Antennæ distinctly pubescent. Wings varied with ochraceous and with brown, the latter hue most prevalent on the under side, where there is a purplish tinge ; interior line blackish, incomplete, undulating ; submarginal line whitish, zigzag, accompanied by black points ; an indistinct denticulated middle line, and a pale very large black-bordered discal spot, which contains a brown point. Fore wings subfalcate, with a blackish whitish-bordered point near the outer side of the interior line ; marginal space partly blackish brown-tinged ; exterior border forming a distinct angle, on each side of which it is slightly excavated ; under side with a deep black streak, which extends from the base, is interrupted by the first discal spot, and is terminated by the second. Hind wings angular and dentated ; fore part of the border blackish brown ; middle line double and very distinct hindward. Length of the body 6 lines ; of the wings 16 lines.

Rio Janeiro. In Mr. Fry's collection.

## 25. AZELINA AMYCLARIA.

**Fœm.** *Fuscescente-cinerea, crassa; alæ anticæ subfalcatus, lineis tribus diffusis nigris, 1a valde lunulata, 2a recta obliqua, 3a undulata, linea intermedia fusca concisa albo punctata vix undulata, punctis paucis submarginalibus nigris unoque discali albo, margine exteriori biangulato; posticæ subdentatæ, linea tenui albida recta obliqua, macula discali subtus conspicua.*

**Female.** Brownish cinereous, very robust. Third joint of the palpi very minute. Legs with a few white points; spurs short, white, black-banded. Fore wings subfalcate, with three black diffuse lines; first line forming deep curves; second straight, oblique; third undulating; a brown concise, white-pointed hardly undulating line between the second and third lines; a white discal point and a few black submarginal points; exterior border forming two angles, its hind part very oblique. Hind wings with a slender straight oblique whitish line; exterior border slightly dentated; under side with a black conspicuous discal dot. Length of the body 7 lines; of the wings 17 lines.

**Basil.** In Mr Saunders' collection.

## Asia.

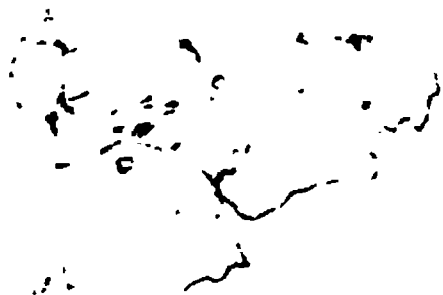
## 26. AZELINA CLELIA.

*Cinerea; alæ ferrugineo-nigroque conspersæ, ferrugineo ex parte tinctæ, puncto discali vitreo nigricante marginato, lineis obliquis fuscescentibus indistinctis, margine exteriori valde angulato; anticæ lineis apud costam retractis bene determinatis, litura subapicali vitrea.*

**Phalæna Clelia, Cram. Pap. Exot. iii. 172, pl. 288, f. B, C.**

**Coromandel?**

**a. Australia.** Presented by J. Hunter, Esq.



## Country unknown.

## 27. AZELINA? ATRAPESARIA.

**Mas.** *Cinereo-fusca*; palpi vix robusti; antennæ simplices, vix pubescentes; pedes sat graciles; alæ latiusculæ, fimbria rufescente-ferruginea; anticæ subfalcatae, lineis duabus nigricantibus, 1a valde undulata postice obsoleta, 2a obliqua vix undulata extus concisa intus diffusa, margine exteriori biangulato; posticæ denticulatae, linea obliqua recta pallido marginata, punctis tribus marginalibus posticis.

**Male.** Cinereous-brown. Palpi hardly stout; third joint very minute. Antennæ simple, hardly pubescent. Legs rather slender; spurs long. Wings rather broad; fringe reddish ferruginous. Fore wings subfalcate, with two blackish lines; interior line very undulating, obsolete hindward; exterior line oblique, slightly undulating, very concise on the outer side, diffuse on the inner side; exterior border forming two very slight angles. Hind wings denticulated, with a slender straight oblique line, which is pale-bordered exteriorly; exterior border with three black points hindward. Length of the body 6 lines; of the wings 15 lines.

a. ———?

## Genus 37. SYNEMIA.

Corpus valde robustum. Frons squamosa, non fasciculata. Palpi breves, crassi; articulus 3us conicus, distinctus. Antennæ maris pubescentes, foeminae setaceæ. Thorax quadratus, latus, antice fasciculatus. Abdomen crassum, maris fasciculo apicali quadrato. Pedes validi; femora lata; tibiæ non incrassatæ; tarsi subspinosi. Alæ densæ, dentatæ; anticæ margine exteriori inciso.

Pergama, *Herr.-Sch.*

Synemia, *Guen. Phal.* i. 163.

Body very robust. Front squamous, not tufted. Palpi short, thick; second joint oval; third conical, distinct. Antennæ pubescent in the male, setaceous in the female. Thorax quadrate, broad, tufted in front. Abdomen thick, with a quadrate tip in the male. Legs stout; femora broad; tibiæ not incrassated; tarsi slightly spinose. Wings thick, dentated. Fore wings with a deep notch on the exterior border.

## 1. SYNEMIA POLYGONARIA.

*Crocea; alæ nigro strigatæ; anticæ basi spatioque lato marginali fuscis, incisuris duabus anguloque intermedio obtuso; posticæ flavae, linea exteriori recta nigricante postice dilatata.*

*Pargama polygonaria*, Herr.-Sch. *Exot. Schm.* 41, pl. 72, f. 412, 413.

*Synemia polygonaria*, Guen. *Phal.* i. 164, 261, pl. 8, f. 2.

Brazil.

## Genus 38. ODONTOPERA.

Corpus robustum. Frons villosa, non fasciculata. Palpi porrecti aut subascendentes; articulus 3us distinctus, linearis, porrectus. Antennæ longæ, plus minusve pectinatæ, apice attenuatæ, ramis clavatis. Thorax et pectus dense pilosa. Abdomen longum, subdepressum, alas posticas superans, fœminæ acuminatum fasciculis duabus lateralibus apicalibus. Pedes graciles; tarsi subspinosi. Alæ amplæ, densæ, margine exteriori, valde dentato.

*Gonodontia*, p., Hübn. *Verz. Schm.* 287.

*Enomos*, p., Treit.; Boisd.; Dup.

*Odontopera*, Steph. *Ill. Brit. Haust.* iii. 162; Herr.-Sch.; Led. Z. B. V. W. iii. 204; Guen. *Phal.* i. 165.

Body robust. Front villose, not tufted. Palpi porrect or slightly ascending; third joint distinct, linear, extending forward. Antennæ long, more or less pectinated, attenuated at the tips; branches clavate. Thorax and pectus thickly clothed. Abdomen long, extending beyond the hind wings, slightly depressed, acuminate, and with a tuft on each side of the tip in the female. Legs slender; tarsi slightly spinose. Wings ample, thick; exterior border strongly dentated.

## Europe.

## 1. ODONTOPERA BIDENTATA.

*Cinereo-fuscescens; alæ nigro conspersæ; alæ annulo discali lineaque exteriori vix undulata nigris; anticæ lineis duabus subdenticulatis albo signatis.*

———, Albin, *Ins.* pl. 96, f. a—c. *Deg. Ins.* i. pl. 25, f. 1—7; ii. 343. *De Vill. Ent. Linn.* ii. 299, 412.

- Phalæna-Geometra bidentata*, Linn. *Faun. Suec.* 1255. *Clerck, Icon.* pl. 7, f. 2.
- Phalæna bidentaria*, *Fabr. Sp. Ins.* ii. 245, 19; *Mant. Ins.* ii. 186, 22; *Ent. Syst.* iii. 2, 133, 15.
- Phalæna-Geometra dentaria*, *Gmel. ed. Syst. Nat.* i. 5, 2451, 608.
- Geometra dentaria*, *Schr. Faun. Boic.* ii. 2, 16, 1629. *Esp. Schm.* v. 102, pl. 20, f. 1—3. *Hübner. Geom.* pl. 3, f. 12.
- Geometra bidentata*, *Bork. Eur. Schm.* v. 97, 44. *Gölze, Ent. Beytr.* iii. 3, 363, 10. *Lang. Verz.* ii. 168, 1173.
- Gonodontis dentaria*, *Hübner. Verz. Schm.* 287, 2797.
- Ennomos dentaria*, *Treit. Schm.* vi. 1, 76, 29. *Dup. Lép.* iv. 150, pl. 143, f. 5, 6. *Frey. Beitr.* ii. pl. 156. *Boisd. Ind.* 183, 1466.
- Odontopera bidentata*, *Steph. Ill. Brit. Haust.* iii. 163. *Guen. Phal.* i. 165, 262. *Staint. Man.* ii. 13.
- Odontopera dentaria*, *Herr.-Sch. Eur. Schm.* iii. 45, 118.
- a—k. England. From Mr. Stephens' collection.
- l—u. England.
- w, z. Europe. From M. Becker's collection.

## 2. ODONTOPERA DARDONARIA.

*Alæ concolores rufescentes, dentatæ, fusco pulverulentæ, puncto fusco discali; anticæ strigis duabus pallidis.*

- Crocallis Dardoinaria*, *Donzel, Ann. Soc. Ent. Fr.* ix. 59, pl. 4, f. A, B. *Herr.-Sch. Eur. Schm.* iii. 44, f. 45, 46.
- Ennomos Dardoinaria*, *Dup. Lép. Sup.* iii. 617, pl. 50, f. 8.
- Crocallis aglossaria*, *Boisd. Ind.* 184, 1461.
- Odontopera Dardoinaria*, *Guen. Phal.* i. 167, 266.
- Marseilles.

- a. Europe. From M. Becker's collection.

## South America.

### 3. ODONTOPERA EDENTARIA

*Mas et fœm. Cinerascens; alæ punctis marginalibus inæqualibus, fimbria rufescente; anticæ lineis duabus valde sinuatis sat approximatis, spatio intermedio ferrugineo, gutta discali nigra, punctis apicalibus cinereo pupillatis; posticæ linea una tremula nigricante.*

- Odontopera edentaria*, *Guen. Phal.* i. 166, 263.

Brazil.

## Africa.

## 4. ODONTOPERA EREBARIA.

**Mas.** *Saturate nigro-cinerea; alæ anticæ venis ferrugineis, lineis duabus remotis ex parte indeterminatis, 1a obscura dentibus rotundatis, 2a angulis valde obtusis, macula discali cinereo pupillata punctisque marginalibus nigris, margine exteriori subangulato; posticæ pallide cinereæ, dentibus parvis æqualibus.*

*Odontopera erebaria, Guen. Phal. i. 166, 264.*

Cape.

## 5. ODONTOPERA INTEGRARIA.

**Fœm.** *O. erebariæ simillima; alæ subintegræ; anticæ linea exteriori informi dentibus rotundatis pallido non marginata; posticæ obscuriores, linea submarginali arcuata dentata.*

*Odontopera integraria, Guen. Phal. i. 166, 265.*

Abyssinia.

## Genus 39. CROCALLIS.

**Corpus** valde robustum. **Frons** porrecta, villosa, non fasciculata. **Proboscis** nulla aut vix conspicua. **Palpi** porrecti, usque ad apices vestiti; **articulus 3us** ovatus aut truncatus. **Thorax** globosus, dense vestitus. **Pedes** validi; **femora** pilosa; **tibiæ** non incrassatæ; **calcaria** longa; **tarsi** breves, glabri. **Alæ** densæ, velutinae, **fimbria** longa plana; **anticæ** acutæ, subfalcatæ, **dentibus marginalibus** inæqualibus obtusis; **posticæ** subdentatæ. **Mas.**—**Antennæ** late pectinatae, ramis apice recurvis. **Fœm.**—**Antennæ** filiformes. **Abdomen** valde incrassatum, apice obtusum.

*Colotois, p., Hübn. Verz. Schm. 288.*

*Crocallis, Treit. Schm. i. 151.; Dup.; Boisd.; Steph.; Herr.-Sch.; Led. Z. B. V. W. iii. 205; Guen. Phal. i. 167.*

**Body** very robust. **Front** villose, prominent, without a distinct tuft. **Proboscis** none or rudimentary. **Palpi** porrect, clothed to the tips; **third joint** ovate or truncated. **Thorax** globose, thickly clothed. **Legs** stout; **femora** pilose; **hind tibiæ** not incrassated, with long spurs; **tarsi** short, smooth. **Wings** thick, velvety; **fringe** long, full. **Fore wings** acute, subfalcate; **exterior border** with obtuse and unequal teeth. **Hind wings** slightly dentated. **Male.**—

Antennæ deeply pectinated to the tips; branches thick, recurved at the tips. *Female*. — Antennæ filiform. Abdomen very thick, ending in an obtuse point.

### 1. CROCALLIS ELINGUARIA.

*Pallide ochracea; alæ gutta discali punctisque submarginalibus nigris; anticæ lineis duabus postice approximatis ferrugineis, 2a subundulata, spatio intermedio saturate ochraceo.*

———, Albin, *Ins.* pl. 39, f. 63; pl. 41, f. 67. *Roës. Ins.* i. 3, 33, pl. 9. *DeVill. Ent. Linn.* ii. 304, 404.

*Phalæna-Geometra elinguaris*, Linn. *Syst. Nat.* i. 2, 862, 211; *Faun. Suec.* 1235. *Gmel. ed. Syst. Nat.* i. 5, 2461, 211.

*Phalæna elinguaris*, Fabr. *Sp. Ins.* ii. 252, 58; *Mant. Ins.* ii. 195, 89; *Ent. Syst.* iii. 2, 159, 107.

*Geometra elinguaris*, Wien. *Verz.* 103, 11. *Brahm, Ins.* ii. 1, 360, 233. *Schwarz, Ins.* i. 133, 124, &c. *Müll. Faun. Fridr.* 48, 422; *Zool. Dan.* 125, 1442. *Schr. Faun. Boic.* ii. 2, 10, 1621. *Lang. Verz.* ii. 171, 1209. *Naturf.* vii. 128. *Götze, Ent. Beytr.* iii. 3, 296, 211. *Fuessl. Schw. Ins.* 39, 761. *Bork. Eur. Schm.* v. 74, 34. *Esp. Schm.* v. 112, pl. 22, f. 1—5. *Ill. N. Ausg. dess.* i. 395, 11. *Hübner. Geom.* pl. 4, f. 20. *Haw. Lep. Brit.* 291.

*Colotois elinguaris*, Hübner. *Verz. Schm.* 288, 2802.

*Crocallis elinguaris*, Treit. *Schm.* vi. 1, 153, 2. *Dup. Lép.* iv. 165, pl. 146, f. 3. *Steph. Ill. Brit. Haust.* iii. 162, 1. *Boisd. Ind.* 184, 1462. *Herr.-Sch. Eur. Schm.* iii. 44, 116. *Guen. Phal.* i. 163, 2. *Staint. Man.* ii. 14.

*a—p.* England. From Mr. Stephens' collection.

*q—u.* England.

*w—z.* Europe. From M. Becker's collection.

### 2. CROCALLIS TRAPEZARIA.

*Testacea; alæ subdentatæ; anticæ lineis duabus nigricantibus postice approximatis, 1a subrecta, 2a subundulata, spatio intermedio rufescente-testaceo, gutta discali nigra.*

*Crocallis trapezaria*, Boisd. *Ind.* 184, 1463. *Dup. Cat.* 220. *Guen. Phal.* i. 169, 268.

*Eugonia trapezaria*, Herr. *Sch. Eur. Schm.* iii. 44, 115.



*Crocallis trapezaria*, *Boisd. Ind.* 184, 1463. *Dup. Cat.* 220, *Herr.-Sch. Eur. Schm.* iii. 44, 114, f. 411. *Guen. Phal.* i. 169, 269.

Montpellier.

### 3. CROCALLIS TUSCIARIA.

*Rufescente-cervina*; *alæ nigro plus minusve conspersæ, linea exteriore undulata nigricante, gutta discali punctisque marginalibus nigris*; *antica ochracea, linea interiore nigricante subundulata, spatio inter lineas rufescente-cervino, postica testaceo-cinerea.*

*Geometra tusciaria*, *Scriba, Ins.* 217, pl. 17, f. 10, 11.

*Geometra extimaria*, *Hübner. Geom.* pl. 4, f. 21.

*Colotois extimaria*, *Hübner. Verz. Schm.* 288, 2804.

*Crocallis extimaria*, *Treit. Schm.* vi. 1, 152, 1. *Dup. Lep.* iv. 178, pl. 146, f. 4. *Boisd. Ind.* 184, 1460. *Herr.-Sch. Eur. Schm.* iii. 44, 114, f. 22—24.

*Crocallis, tusciaria*, *Guen. Phal.* i. 169, 269.

South France. Italy. Hungary.

—c. Europe. From M. Becker's collection.

## Australia.

### 4. CROCALLIS NEWMANNARIA.

*Mas. Fusco-cinerea*; *tibiæ posticæ incrassatæ, albida, calcariibus obscuris*; *alæ anticae acutæ, nigro-conspersæ, venis pallidioribus rufescente-cinereis, linea 1a biangulata, 2a subsinuata nigro punctata, spatio intermedio obscuriore, macula discali nigricante non bene determinata*; *posticæ cinereæ, vix dentatæ*; *linea punctulari, fimbria rufescente, angulo interiore producto.*

*Crocallis Newmannaria*, *Guen. Phal.* i. 169, 270.

Tasmania.

## Genus 40. ENTOMOPTERYX.

*Mas. Corpus gracile. Palpi caput longe superantes; articulus 3us porrectus, gracilis, distinctissimus, apice subincrassatus. Antennæ sabrelutinæ. Tibiæ posticæ fusiformes, tumidæ, intus fasciculatæ,*

calcaribus brevissimis remotis, tarsis subspinosus. Alæ subtus villosæ, margine exteriori dentato sinuato; posticæ margine exteriori postico truncato.

Entomopteryx, *Guen. Phal.* i. 170.

*Male.* Body slender. Palpi extending far beyond the head; third joint porrect, slender, very distinct, slightly incrassated at the tip. Antennæ slightly velvety. Hind tibiæ fusiform, much swollen, with tufted furrows; spurs very short and remote; tarsi with small spines. Wings with the exterior border dentated and sinuated; under side flecked with hairs. Hind wings with the hind part of the exterior border truncated.

#### 1. ENTOMOPTERYX AMPUTATA.

*Late flavo-ochracea; alæ conspersæ, linea obliqua nigra vix undulata; antica puncto lituraque interiore discalibus nigris; margine exteriori angulato, striga apud angulum lata nigricante.*

Entomopteryx amputata, *Guen. Phal.* i. 171, 271, pl. 21, f. 1.

Hindustan?

#### Genus 41. METANEMA.

Corpus robustum. Frons plana, non fasciculata. Proboscis brevis, gracilis. Palpi brevissimi, gracillimi, disjuncti. Antennæ maris pectinatæ, fœminæ setacæ. Abdomen fœminæ ovatum. Pedes glabri, longi, graciles; tibiæ posticæ non incrassatæ, calcaribus approximatis. Alæ margine exteriori angulato aut dentato, fimbria brevi; anticæ acutæ.

Metanema, *Guen. Phal.* i. 171.

*Female.* Body robust. Front flat, not tufted. Proboscis short, slender. Palpi very short and slender, separate, hardly reaching the front. Antennæ pectinated in the male, setaceous in the female. Abdomen ovate in the female. Legs smooth, long, slender; hind tibiæ not incrassated; spurs approximate to each other. Wings with the exterior border angular or dentated; fringe short. Fore wings acute.

## North America.

## 1. METANEMA INATOMARIA.

*Columbino-cinerea; alæ linea exteriorè obliqua subrecta albida ferrugineo marginata; anticæ striga apicali lineaque interiorè apud costam angulata albidis ferrugineo marginatis, gutta discali nigro-fusca.*

*Metanema inatomaria*, Guen. *Phal.* i. 171, 272, pl. 3, f. 7.

a. b. New York. Presented by E. Doubleday, Esq.

c. Canada. Presented by Dr. Barnston.

## 2. METANEMA FORFICARIA.

*Fœm. Pallide testacea; alæ puncto discali nigro; anticæ falcata, acuta, squamis nonnullis nigris, lineis duabus pallidis undulatis, fimbria saturatiore, margine exteriorè undulato, apice nigro-cinereo; posticæ pallidiores, subdentatæ, linea non bene determinata.*

*Metanema forficaria*, Guen. *Phal.* i. 172, 273.

California.

## 3. METANEMA QUERCIVORARIA.

*Fœm. Testaceo-cinerea; alæ dentatæ, nigro conspersæ, puncto discali nigro; anticæ costa, venis, margine lineisque duabus rufo-fuscis, linea 1a antice flexa, 2a remota diffusa subflexuosa, linea submarginali tenui rufescente; posticæ linea exteriorè, margine exteriorè rufo-fusco.*

*Metanema quercivoraria*, Guen. *Phal.* i. 172, 275.

North America.

## Africa.

## 4. METANEMA MOLLIARIA.

*Fœm. Straminea; alæ valde acutæ, strigis lineaque exteriorè pallide rufescentibus, atomis exterioribus confluentibus; anticæ biplagiata, linea interiorè non bene determinata, exteriorè biflexa, plaga 1a viridescens varia, 2a e atomis nigris strigata.*

*Metanema molliaria*, Guen. *Phal.* i. 172, 274.

Abyssinia.

## Genus 42. ENNOMOS.

Corpus robustum. Frons fasciculo porrecto acuminato lanuginoso. Proboscis nulla aut vix conspicua. Palpi rostriformes, acuti, pilosi, subincumbentes. Thorax et pectus pilosa. Pedes breves, squamosi, sat graciles; tibiæ non incrassatæ, calcaribus parvis; tarsi glabri. Alæ densæ, velutinæ, margine exteriori inæqualiter dentato. *Mas.*—Antennæ late pectinatæ. Abdomen gracile; fasciculus apicalis quadratus. *Fæm.*—Antennæ serratæ. Abdomen ovatum, incrassatum, abrupte acuminatum.

*Eugonia*, p., *Hübner. Verz. Schm.* 291; *Herr.-Sch.*; *Led. Z. B. V. W.* iii. 203.

*Ennomos*, *Treit. Schm.* i. 3; *Dup.*; *Boisd.*; *Steph.*; *Guen. Phal.* i. 173.

*Odoptera*, *Sodoff*; *Steph. Cat. Brit. Mus. Lep.*

Body robust. Front with a woolly produced and acuminated tuft. Proboscis none or rudimentary. Palpi slightly incumbent, rostriform, acute, pilose. Antennæ robust, broadly pectinated in the male, serrated in the female. Thorax and pectus pilose. Abdomen slender and terminated by a quadrate tuft of hairs in the male, ovate, very thick, and terminating abruptly in the female. Legs short, rather slender, squamous; tibiæ not incrassated; spurs short; tarsi smooth. Wings thick, velvety; exterior border dentated, with one tooth rounded and more prominent than the others.

## Europe.

## A. Alæ posticæ non lineatæ.

A. Alæ anticæ spatio intermedio saturatiore. *quercaria*, *Hübner*.

B. Alæ anticæ spatio intermedio non saturatiore.

a. Alæ anticæ lineis interruptis. - - *Alniaria*, *Linn.*

b. Alæ anticæ lineis non interruptis. *erosaria*, *Wien. Verz.*

## B. Alæ posticæ lineatæ.

A. Alæ anticæ spatio marginali non saturatiore.

a. Alæ lineis cinereis. - - - *Tiliaria*, *Bork.*

b. Alæ lineis ferrugineis. - - *angularia*, *Wien. Verz.*

B. Alæ anticæ spatio marginali saturatiore.

a. Alæ anticæ spatio marginali cinerascente.

*fuscantaria*, *Haw.*

b. Alæ anticæ spatio marginali rufescente. - *effractaria*, *Frey.*

## 1. ENNOMOS ALNIARIA.

*Flavescente-ochracea ; alæ ferrugineo conspersæ, valde dentatæ, spatio marginali ex parte rufescente-ochraceo ; anticæ lineis duabus obliquis interruptis ferrugineis.*

- , *Roës. Ins.* i. 3, 1, pl. 1, f. 1—6. *Deg. Ins.* i. 2, 101 ; iv. 118, pl. 10, f. 13, 14. *Sepp, Ins.* vi. 29, pl. 7, f. 1—6. *De Vill. Ent. Linn.* ii. 295, 406. *Schæff. Icon.* pl. 135, f. 1, 2.
- Phalena-Geometra Alniaria*, *Linn. Syst. Nat.* i. 2, 860, 205 ; *Faun. Suec.* 1230. *Gmel. ed. Syst. Nat.* i. 5, 2450, 205.
- Phalena Alniaria*, *Fabr. Sp. Ins.* ii. 244, 16 ; *Mant. Ins.* ii. 186, 19 ; *Ent. Syst.* iii. 2, 136, 24.
- Geometra Alniaria*, *Wien. Verz.* 103, 2. *Schwarz, Beytr.* 150, pl. 20, f. 5—8. *Schr. Faun. Boic.* ii. 2, 11, 1623. *Bork. Eur. Schm.* v. 83, 38. *Panz. Faun.* 22. *Esp. Schm.* v. 55, pl. 9, f. 1—6. *Fuessl. Schw. Ins.* 39, 756. *Lang. Verz.* ii. 167, 1170. *Berl. Mag.* iv. 5, 518, 27. *Naturf.* vii. 127. *Götze, Ent. Beytr.* iii. 3, 289, 205. *Mull. Faun. Fridr.* 48, 419 ; *Zool. Den.* 125, 1439. *Hüb. Geom.* pl. 5, f. 26.
- Eugonia Alniaria*, *Hüb. Verz. Schm.* 291, 2826. *Herr.-Sch. Eur. Schm.* iii. 41, 108.
- Ennomos Alniaria*, *Treit. Schm.* vi. 1, 79, 30. *Dup. Lép.* iv. 139, pl. 142, f. 1, 2. *Steph. Ill. Brit. Haust.* iii. 164. *Boisd. Ind.* 183, 1455. *Guen. Phal.* i. 175, 277. *Staint. Man.* ii. 15.
- a. England. From Mr. Stephens' collection.
- b, c. Europe. From M. Becker's collection.

## 2. ENNOMOS TILIARIA.

*Ochracea ; thorax flavus ; alæ cinereo conspersæ, lunula discali lineaque exteriore vix undulata cinereis ; anticæ linea interiore subarcuata cinerea, angulo obtuso incisuraque postica marginalibus ; posticæ valde dentatæ.*

- , *Deg. Ins.* i. 101, pl. 10, f. 9.
- Geometra Tiliaria*, *Bork. Eur. Schm.* v. 87, 39. *Hüb. Geom.* pl. 5, f. 23.
- Geometra canaria*, *Esp. Schm.* v. pl. 19, f. 2, 3. *Hüb. Beytr.* ii. 4.
- Eugonia Tiliaria*, *Hüb. Verz. Schm.* 292, 2831. *Herr.-Sch. Eur. Schm.* iii. 41, 107.

*Ennomos Tiliaria*, *Treit. Schm.* vi. 12, 295. *Dup. Lép.* iv. 142, pl. 143, f. 1, 2. *Steph. Ill. Brit. Haust.* iii. 166. *Boisd. Ind.* 183, 1454. *Guen. Phal.* i. 175, 278. *Staint. Man.* ii. 15.

*Geometra Alniaria*, *Donov. Brit. Ins.* viii. 61, pl. 275. *Haw. Lep. Brit.* 293.

*Ennomos canaria*, *Steph. Ill. Brit. Haust.* iii. 165.

*a—m.* England. From Mr. Stephens' collection.

*n—t.* England.

*v, x.* Europe. From M. Becker's collection.

### 3. ENNOMOS FUSCANTARIA.

*Crocea ; alæ anticæ rectangulatæ, lineis duabus cinereis obliquis subarcuatis postice approximatis, spatio exteriori cinerascens, margine exteriori postico valde inciso ; posticæ angulatæ, linea una tenui subrecta.*

*Geometra fuscantaria*, *Haw. Prodr.* *Steph. Ill. Brit. Haust.* iii. 167.

*Geometra carpinaria*, *Haw. Lep. Brit.* 295.

*Phalæna equestraria* ?? *Fabr. Sp. Ins.* ii. 244, 15 ; *Mant. Ins.* ii. 186, 18 ; *Ent. Syst.* iii. 23.

*Phalæna-Geometra equestraria* ?? *Gmel. ed. Syst. Nat.* i. 5, 2450, 606.

*Geometra equestraria* ?? *Bork. Eur. Schm.* v. 43.

*Ennomos fuscantaria*, *Guen. Phal.* i. 176, 279, pl. 8, f. 5. *Staint. Man.* ii. 15.

*a.* England. From Mr. Stephens' collection.

*b.* England. From Mr. Stevens' collection.

### 4. ENNOMOS QUERCARIA.

*Pallide crocea ; alæ fimbria fusco punctata ; antica apice quadrata, lineis duabus cinereis obliquis subrectis pallido marginatis postice approximatis, spatio intermedio saturatiore ; posticæ angulatæ, subdentatæ.*

*Geometra quercaria*, *Hübner. Geom.* f. 411, 412.

*Eugonia quercaria*, *Hubn. Verz. Schm.* 292, 2829. *Herr.-Sch. Eur. Schm.* iii. 41, f. 248, 249.

*Ennomos quercaria*, *Treit. Schm. Sup.* x. 174. *Guen. Phal.* i. 177, 280.

Croatia.

## 5. ENNOMOS EROSARIA.

*Ochracea*; *thorax flavescens*; *alæ angulo marginali bene determinato, fimbria albida ferrugineo notata*; *anticae lineis duabus rufescentibus obliquis subrectis postice approximatis.*

———, *Sepp, Ins.* iv. pl. 41, f. 1—5.

*Geometra erosaria*, *Wien. Verz.* 103, 4. *Ill. N. Ausg. dess.* i. 400, 4. *Bork. Eur. Schm.* v. 92, 41. *Schr. Faun. Boic.* ii. 2, 12, 1625. *Hüb. Geom.* pl. 5, f. 25. *Esp. Schm.* v. pl. 11, f. 1, 2. *Haw. Lep. Brit.* 293.

*Phalaena crassaria*, *Fabr. Ent. Syst.* iii. 2, 135, 21.

*Geometra tiliaria*, *Esp. Schm.* v. 60, pl. 11, f. 3—7.

*Geometra quercinaria*, *Bork. Eur. Schm.* v. 94, 42. *Berl. Mag.* iv. 5, 520, 31.

*Eugonia erosaria*, *Hüb. Verz. Schm.* 292, 2828. *Herr.-Sch. Eur. Schm.* 42, 111.

*Eugonia quercinaria*, *Hüb. Verz. Schm.* 292, 2830.

*Ennomos erosaria*, *Treit. Schm.* vi. 1, 73, 28. *Dup. Lép.* iv. 147, pl. 143, f. 4. *Frey. Beitr.* iii. 216. *Guen. Phal.* i. 177, 281. *Staint. Man.* ii.

*Geometra erosaria*, *Steph. Ill. Brit. Haust.* iii. 165, 5.

*Geometra ochraria*, *Steph. Ill. Brit. Haust.* iii. 165, 4.

♂-p. England. From Mr. Stephens' collection.

♀-y. England.

z-aa. Europe. From M. Becker's collection.

## 6. ENNOMOS EFFRACTARIA.

*Crocea*; *alæ anticae apice rectangulatae, lineis duabus obliquis nigricantibus postice valde approximatis, 1a apud costam angulata, 2a subarcuata extus cinereo marginata, litura discali ferruginea, margine exteriori postico valde inciso*; *posticae subdentatae, linea tenui subundulata, spatio marginali lato rufescente.*

*Ennomos effractaria*, *Frey. Beitr.* iv. pl. 353, f. 1. *Guen. Phal.* i. 178, 282.

*Eugonia effractaria*, *Herr.-Sch. Eur. Schm.* iii. 43, 113, f. 25, 26.

*Sarepta.*

## 7. ENNOMOS ANGULARIA.

*Pallide ochracea ; alæ linea exteriorè subarcuata ferruginea, fimbriæ ex parte albida, margine exteriorè subangulato ; anticæ lineæ interiorè apud costam flexa punctoque discali ferrugineis.*

———, Geoffr. *Ins.* ii. 127, 36. *De Vill. Ent. Linn.* ii. 301, 416. *Kleem. Ins.* pl. 16, f. A, B. *Sépp, Ins.* iv. pl. 23, f. 1—5.

*Geometra angularia*, *Wien. Verz.* 103, 3. *Ill. N. Ausg. dess.* i. 399, 3. *Bork. Eur. Schm.* v. 90, 40. *Esp. Schm.* v. 59, pl. 10, f. 1, 2. *Lang. Verz.* ii. 169, 1186. *Gölze, Ent. Beytr.* iii. 3, 394. *Hübner. Geom.* pl. 5, f. 22. *Haw. Lep. Brit.* 294, 65.

*Geometra lacertinaria*, *Sulz. Gesch.* pl. 22, f. 10.

*Geometra carpinaria*, *Hübner. Geom.* pl. 5, f. 27.

*Eugonia angularia*, *Hübner. Verz. Schm.* 292, 2832. *Herr.-Sch. Eur. Schm.* iii. 42, 112.

*Ennomos angularia*, *Treit. Schm.* vi. 1, 69, 27. *Steph. Ill. Brit. Haust.* iii. 166. *Dup. Lép.* iv. 144, pl. 142, f. 36. *Boisd. Ind.* 183, 1450. *Guen. Phal.* i. 179, 283. *Staint. Man.* ii.

*Geometra tiliaria*, *Haw. Lep. Brit.* 294, 63.

*Geometra quercinaria*, *Haw. Lep. Brit.* 294, 64.

*Ennomos quercaria*, *Steph. Ill. Brit. Haust.* iii. 166.

*Ennomos carpinaria*, *Steph. Ill. Brit. Haust.* iii. 167.

a—z. England. From Mr. Stephens' collection.

aa—ii. England.

j, kk. Europe. From M. Becker's collection.

l. France.

mm—oo. ——— ?

## Species incertæ.

## 8. ENNOMOS ? TRINOTATA.

*Alæ pallide stramineæ aut cinereæ, fusco pulverulosæ, postice fuscæ ; anticæ macula media fusca medio albida strigisque duabus ex maculis singulis costæ fuscis prodeuntibus curvatis, posteriore per alas posticas producta.*

*Geometra (Ennomos) trinotata*, *Metzner, Ent. Zeit. Stett.* vi. 184, 2.  
European Turkey.



## 9. ENNOMOS? ACUMINARIA.

*Alæ fulvo-flavescentes, striga externa sinuata margine abdominali posticarum ad apicem anticarum ducta, obscure fusca, cum umbra fusco-fulva externe adjacente.*

*Ennomos acuminaria*, *Eversm. Bull. Soc. Imp. Nat. Mosc.* 1851, xxiv. No. 2, 636, 23.

Lake Noor-Saissan.

## 10. ENNOMOS? ANICULARIA.

*Alæ anticae cinereae; strigis duabus ordinariis, aream mediam obscuriorem includentibus, annulo medio lunulaque apicali fuscis; posticae albido-cinereae, striga externa fusca.*

*Ennomos anicularia*, *Eversm. Bull. Soc. Imp. Nat. Mosc.* 1852, i. 159, 8.

Lower Wolga and Ural.

## North America.

## 11. ENNOMOS MAGNARIA.

*Crocea; alæ diffuse et inaequaliter nigro punctatae, lineis duabus plus minusve interruptis nigricantibus, extus saturatiores, margine exteriore dentato et valde angulato, fimbria ex parte nigra.*

*Ennomos magnaria*, *Guen. Phal.* i. 174, 276.

s—c. New York. Presented by E. Doubleday, Esq.

d. Lachine, near Montreal. Presented by Dr. Barnston.

e, f. Nova Scotia. From Lieut. Kedman's collection.

## 12. ENNOMOS SUBSIGNARIA.

*Alba, sericea; alæ nitentes; anticae margine exteriore subangulato; posticae litura discali subtilius fuscescente vix conspicua, margine exteriore subangulato.*

*Eudalimia subsignaria*, *Hübner. Samml. Exot. Schmett.* ii. *Lep.* v. *Geom.* i. *Amph.* iii. *Eusarcæ*, A. *Capaces*, 1, f. 1—4.

*Ennomos subsignaria*, *Guen. Phal.* i. 284, 181.

*a—k.* Trenton Falls, New York. Presented by E. Doubleday, Esq.

*l—t.* Nova Scotia. From Lieut. Redman's collection.

### Genus 43. HIMERA.

Corpus robustum. Fasciculus frontalis porrectus, obtusus. Proboscis gracilis. Palpi porrecti, brevissimi, caput non superantes; articulus 3us minutus. Thorax densissime vestitus. Pedes graciles; tibiæ non incrassatæ; calæmaria brevissima; tarsi glabri. Alæ amplæ, subdentatæ; anticæ apice quadratæ; posticæ rotundatæ, non angulatæ.

Colotois, p. *Hübner. Verz. Schm.* 288.

Crocallis, p. *Treit.*

Himera, *Dup. Lép.* iv. 169; *Boisd.*; *Steph.*; *Herr.-Sch.*; *Led.*; *Guen. Phal.* i. 181.

Metra, *Steph. Cat.*

Body stout. Frontal tuft prominent, obtuse. Proboscis slender. Palpi porrect, very short, not extending beyond the head; third joint minute. Antennæ very deeply pectinated in the male, serrated in the female. Thorax large, thickly clothed with cottony hairs. Pectus densely clothed. Abdomen terminating in a diverging tuft in the male, very thick in the female. Legs slender; tibiæ not incrassated; spurs rather short; tarsi smooth. Wings ample, slightly dentated. Fore wings quadrate at the tips. Hind wings rounded, not angular.

#### 1. HIMERA PENNARIA.

*Cinereo-rufescens*; alæ nigro conspersæ, anticæ lincis duabus obliquis subarcuatis postice approximatis punctoque discali nigricantibus, gutta subapicali alba; posticæ gutta discali lineaque exteriore vix conspicuis.

———, *Albin, Ins.* pl. 43, f. 70; pl. 100, f. A—D. *Wilkes, Pap.* pl. 79. *Harris, Engl. Lep.* pl. 45, f. 9. *Sepp, Ins.* vi. pl. 13. *DeVill. Ent. Linn.* ii. 297, 410.

*Phalæna-Geometra pennaria*, *Linn. Syst. Nat.* i. 2, 861, 209; *Famn. Suec.* 1231. *Gmel. ed. Syst. Nat.* i. 5, 2456, 209.

*Phalæna pennaria*, *Fabr. Ent. Syst.* iii. 2, 132, 14.

- cometra pennaria*, *Wien. Verz.* 102, 12. *Ill. N. Ausg. dess.* 1, 396, 12. *Lang. Verz.* ii. 172, 1211. *Gölze, Ent. Beytr.* iii. 3, 295, 209. *Müll. Faun. Fridr.* 48, 420. *Zool. Dan.* 125, 1441. *Bork. Eur. Schm.* v. 76, 35. *Esp. Schm.* v. 97, pl. 18, f. 4—6; pl. 19, f. 1. *Donov. Brit. Ins.* viii. pl. 287, f. 2. *Hübner. Geom.* pl. 3, f. 14. *Haw. Lep. Brit.* 290.
- olotois pennaria*, *Hübner. Verz. Schm.* 288, 2803.
- locallis pennaria*, *Treit. Schm.* vi. i. 156, 3.
- limera pennaria*, *Dup. Lep.* iv. 171, pl. 146, f. 1, 2. *Steph. Ill. Brit. Haust.* iii. 160. *Boisd. Ind.* 184, 1459. *Herr.-Sch. Eur. Schm.* iii. 46, 119. *Guen. Phal.* i. 182, 285.
- var. Geometra bifidaria*, *Haw. Lep. Brit.* 301.
- a.* England. From Mr. Stephens' collection.
- v.* England.
- dd.* Europe. From M. Becker's collection.
- ff.* ——— ? From Mr. Milne's collection.

#### Genus 44. HALESA.

*Mas.* Corpus sat robustum. Fasciculus frontalis porrectus, acutus. Palpi porrecti, vix robusti, caput paullo superantes; articulus 3us minimus. Antennæ pectinatæ. Abdomen alas posticas non superans. Pedes sat graciles; tibiæ posticæ subincrassatæ. Alæ fimbria brevi; anticæ falcatæ, incisuris duabus marginalibus, una anguloque intermedio obtuso; posticæ subdentatæ.

*Male.* Body stout. Frontal tuft prominent, acute. Palpi porrect, hardly stout, extending a little beyond the head; third extremely minute. Antennæ moderately pectinated. Abdomen not extending beyond the hind wings. Legs rather slender; hind tibiæ slightly incrassated. Wings moderately broad; fringe short. Fore wings falcate, like the fore wings of the genus *Attacus*; exterior border broadly excavated on each side of the middle, where it is slightly angular. Hind wings with the exterior border slightly scalloped and dentated.

#### 1. HALESA ASYCHISARIA.

*Mas.* *Cervina*; alæ glauco tinctæ, nigro subconspersæ, linea angulosa obliqua alba, fimbria ferruginea apice alba; anticæ lineis duabus interioribus obliquis vix conspicuis, linea exteriore apud costam retracta, macula postica fusca nonnunquam obsoleta; posticæ linea inæqualiter ferrugineo marginata.

*Male.* Fawn-colour. Wings with glaucous reflections, slightly and minutely black-speckled, with a white oblique zigzag line; fringe ferruginous, mostly tipped with white. Fore wings with two interior oblique very indistinct lines, which are hardly darker than the ground hue; exterior line abruptly retracted near the costa; a brown spot, which is sometimes obsolete, near the hind part of the interior border. Hind wings with the white line irregularly and sometimes broadly ferruginous-bordered; two brown exterior hindward brown spots, which are sometimes obsolete and sometimes white-marked. Length of the body 6—6½ lines; of the wings 15—16 lines.

a. Brazil. From Mr. Stevens' collection.

#### Genus 45. HERBITA.

*Mas.* Corpus robustum. Frons non fasciculata. Proboscis valida. Palpi robusti, porrecti, caput superantes; articulus 3us conicus. Antennæ pectinatæ, apice simplices. Pedes validi; genua postica fasciculis longis densis; tibiæ posticæ valde incrassatæ, calcaribus parvis. Alæ amplæ, robustæ, integræ, fimbria brevi; anticæ apice subrotundatæ, vix falcatæ, margine exteriori subrecto; posticæ abdomen superantes, margine exteriori subconvexo, angulo interiori producto.

*Male.* Body robust. Front not tufted. Proboscis stout. Palpi stout, porrect, extending rather beyond the head; third joint conical, about one-fourth of the length of the second. Antennæ moderately pectinated, simple towards the tips. Legs stout; hind knees with long thick tufts; hind tibiæ much incrassated; spurs short. Wings ample, thick, entire; fringe short. Fore wings somewhat rounded at the tips, which are hardly falcate; exterior border nearly straight. Hind wings extending beyond the abdomen; exterior border slightly convex; interior angle elongated.

This genus much resembles some of the *Urapteryda*!

#### 1. HERBITA AGLAUSARIA.

*Mas.* *Lateritia*; vertex albidus; pedes albido guttati; alæ nigro subconspersæ, lineis duabus obliquis angulosis vix conspicuis albo punctatis, puncto discali nigro albido-marginato; anticæ macula magna costali subapicali albida, puncto contiguo albo.

*Male.* Brick-red. Vertex whitish. Legs with whitish dots. Wings very thinly and minutely black-speckled; two zigzag oblique lines which are almost obsolete and hardly darker than the ground hue, but are distinguished by white points; a black discal whitish-bordered point. Fore wings with a large costal subapical whitish spot, which is contiguous on its inner side to a white costal point. Length of the body 9 lines; of the wings 24 lines.

α. Venezuela. From Mr. Dyson's collection.

### Genus 46. BROTIIS.

Corpus sat robustum. Frons subfasciculata. Proboscis valida. Palpi robusti, porrecti aut subascendentes, caput superantes; articularis 3us conicus, parvus. Pedes graciles, glabri; tibiæ posticæ non incrassatæ, calcaribus longis. Alæ robustæ, amplæ, integræ; antice elongatæ, acutæ, margine exteriori recto perobliquo; posticæ abdomen superantes, margine exteriori convexo vix dentato, angulo interiore producto. *Mas.*—Antennæ subpectinatæ, apice simplices. *Fæm.*—Antennæ simplices.

*Brotis*, Hübn. Verz. Schm. 303.

*Phacelodes*, Guen. Phal. ii. 116.

Body moderately stout. Front slightly tufted. Proboscis stout. Palpi stout, porrect or slightly ascending, extending rather beyond the head; third joint conical, minute. Legs slender, smooth; hind tibiæ not incrassated; spurs long. Wings robust, ample, entire. Fore wings elongated, acute; exterior border straight, very oblique. Hind wings extending beyond the abdomen, with the exterior border convex, hardly scalloped; interior angle somewhat prominent. *Male.*—Antennæ slightly pectinated, simple at the tips; branches very serrated. *Female.*—Antennæ simple.

This genus differs much from the other *Ennomidæ*, but apparently still more from the other established families of the *Geometridæ*. It resembles the preceding genus, with the exception of the legs, which are quite different in structure.

## 1. BROTIS VULNERARIA.

*Ferrugineo-fusca, subtus schistacea; caput et antennæ ochraceæ; alæ plus minusve glaucescente suffusæ, lineis duabus saturatioribus; anticæ linea exteriori saturatiore, vitta aut plaga trigona costali lateritia; posticæ puncto discali albo. Var. — Alæ quatuor gutta discali alba.*

*Brotis vulneraria*, Hübn. Zutr. f. 319, 320; Verz. Schm. 30 2925.

*Sphacelodes vulneraria*, Guen. Phal. ii. 117, 1109, pl. 22, f. 9. Brazil.

a—d. St. Domingo. From Mr. Tweedie's collection.

e. St. Domingo. From Mr. Hearne's collection.

## Genus 47. LYCIMNA.

*Mas.* Corpus crassum. Frons non fasciculata. Proboscis distincta. Palpi arcuati, latissimi, ascendentes, applicati; articulus 3us minimus. Antennæ simplices, vix pubescentes. Abdominis fasciculus apicalis quadratus. Pedes robusti; femora fimbriata; tibiæ posticæ subincrassatæ, calcaribus longissimis. Alæ robustæ, amplæ, fimbria brevi; anticæ falcatæ, quadratæ, margine exteriori angulato, costa extus subconcava; posticæ abdomen superantæ, margine interiore fimbriato apicem versus emarginato.

*Male.* Body thick. Front not tufted. Proboscis distinct. Palpi curved, very broad, applied close to the head; third joint extremely minute. Antennæ simple, very slightly pubescent. Abdomen with a quadrate apical tuft. Legs robust; femora fringed; hind tibiæ slightly incrassated; spurs very long. Wings robust; ample; fringe full. Fore wings falcate, quadrate behind the tip; exterior border forming a prominent angle in the middle, its hind part straight and oblique; costa slightly concave exteriorly. Hind wings extending beyond the abdomen, somewhat acute at the tips; interior angle prominent; interior border fringed, truncate or emarginated towards its tip.

## 1. LYCIMNA POLYMESATA.

**Mas.** *Ochracea; alæ nigro conspersæ, purpurascente-cinereo sub-tinctæ, lineis obscurioribus angulosis vix conspicuis, linea fusca obliqua recta, punctis submarginalibus nigris, fimbria ferruginea apice albida; anticæ strigis nigris obliquis punctisque exterioribus albidis costalibus, gutta discali vitrea.*

**Male.** Ochraceous, paler beneath. Wings black-speckled, slightly purplish cinereous-tinged, with some very indistinct zigzag darker lines and with a straight oblique brown line; a row of submarginal black points, which are most distinct in the hind wings; hinge ferruginous, tipped with whitish. Fore wings with blackish oblique streaks and with three exterior whitish points on the costa; a vitreous discal dot near the exterior side of the line. Length of the body 7 lines; of the wings 18 lines.

**Silhet.** From Mr. Stainforth's collection.

## Genus 48. FASCELLINA.

**Form.** Corpus crassum. Frons non fasciculata. Proboscis conspicua. Palpi robusti, oblique ascendentes, verticem non superantes; articulus 3us minimus. Abdomen alas posticas non superans. Pedes sat robusti; tibiæ posticæ non incrassatæ calcari- bus longis. Alæ densæ, amplæ; anticæ subfalcatæ, margine exte- riore recto postice subexcavato; posticæ apice truncatæ et concavæ, angulo interiore producto.

**Female.** Body thick. Front not tufted. Proboscis moderate. Palpi robust, obliquely ascending, not rising higher than the vertex; third joint very minute. Abdomen not extending beyond the hind wings. Legs rather stout; hind tibiæ not incrassated; spurs long. Wings thick, ample. Fore wings subfalcate; exterior border straight, slightly excavated near the interior angle; interior border slightly concave towards the tip. Hind wings with truncated and concave tips; interior angle somewhat prominent.

## 1. FASCELLINA CHROMATARIA.

**Form.** *Saturate rufa, subtus ex parte lutea; alæ glaucescentes sub-tinctæ, lineis duabus aut tribus albidis vix determinatis obscuro marginatis; anticæ macula discali albida conspersa.*

*Female.* Deep red. Under side of the wings towards the base and of the body luteous. Wings with a slight glaucous tinge and with two or three slight irregular whitish lines, which are bordered with a somewhat darker hue than the ground-colour of the wing. Fore wings with a whitish mostly speckled discal spot. Length of the body 6 lines; of the wings 17 lines.

*a.* Ceylon. Presented by R. Templeton, Esq.

### Genus 49. EUPAGIA.

*Mas.* Corpus sat robustum. Fasciculus frontalis porrectus, acutus. Proboscis distincta. Palpi subascendentes, subangulati, sat validi, caput longe superantes; articulus 3us lanceolatus, 2i triente non brevior. Antennæ latissime pectinatæ. Abdomen alas posticas paullo superans. Pedes sat validi, femora pilosa. Alæ amplæ, subintegræ; anticæ acutæ, margine exteriori subflexo, antice subangulato; posticæ subdentatæ.

*Male.* Body moderately stout. Frontal tuft prominent, acute. Proboscis distinct. Palpi long, moderately stout, slightly ascending, extending far beyond the head; third joint lanceolate, about one-third of the length of the second, with which it forms a slight angle. Antennæ very broadly pectinated. Abdomen extending a little beyond the hind wings; apical tuft very small. Legs moderately stout; femora pilose. Wings ample, nearly entire. Fore wings acute; exterior border with a slight bend in the middle, and with a slight subapical angle. Hind wings very slightly scalloped.

#### 1. EUPAGIA DETERMINATA.

*Mas.* *Rufescente-cinerea; alæ nigro transversæ strigatæ, linea exteriori obscure ferruginea; anticæ fascia undulata fusca, spatio marginali pallido; posticæ pallidæ.*

*Male.* Reddish cinereous. Wings transversely streaked with black; exterior line dark ferruginous. Fore wings with a brown undulating band joining the inner side of the line; space beyond the line paler than the interior part. Hind wings paler than the fore wings; line hardly undulating. Length of the body  $6\frac{1}{2}$  lines; of the wings 14 lines.

*a.* South Africa. Presented by Sir A. Smith.



## Genus 50. EUTŒA.

*Fam.* Corpus gracile. Frons non fasciculata. Proboscis brevis, tenuis. Palpi breves, graciles, porrecti, caput perpaullo superantes; articulus 3us minimus. Antennæ graciles, simplices. Thorax brevis. Abdomen longum. Pedes longi, graciles; tibiæ posticæ subincrassatæ, calcaribus non longis. Alæ amplæ, tenues; anticæ longæ, acutæ, costa subconvexa, margine exteriori recto perobliquo; posticæ costa subdilatata, margine exteriori angulato.

*Female.* Body slender. Front not tufted. Proboscis short, feeble. Palpi short, slender, porrect, extending very little beyond the head: third joint very minute. Antennæ slender, simple. Thorax short. Abdomen long. Legs long, slender; hind tibiæ somewhat incrassated; spurs not long. Wings ample, delicate. Fore wings long, acute; costa slightly convex; exterior border straight, extremely oblique. Hind wings little more than half the length of the fore wings; costa somewhat dilated; exterior border distinctly angular.

## 1. EUTŒA PERSONARIA.

*Fam.* *Pallide testacea; alæ fusco transverse substrigatæ, linea fusca recta valde obliqua antice obsoleta; anticæ punctis marginalibus nigricantibus; posticæ linea 2a indeterminata valde interrupta.*

*Female.* Pale testaceous. Wings minutely and transversely speckled with brown; a brown straight line, which is most distinct on the hind wings, and extends from before the middle of their interior border towards the tips of the fore wings, on approaching which it becomes obsolete. Fore wings with blackish marginal points. Hind wings with some slight traces of a more exterior line, of which the middle part is quite obsolete. Length of the body  $7\frac{1}{2}$  lines; of the wings 21 lines.

α. ———? Presented by E. Doubleday, Esq.

## Genus 51. CŒNINA.

*Mas et fem.* Corpus sat robustum. Frons non fasciculata. Proboscis subobsoleta. Palpi porrecti, breves, caput paullo superantes; articulus 3us minimus. Antennæ breviusculæ. Pedes

breves, sat validi; tibiæ posticæ non incrassatæ, calcaribus parvis. Alæ longæ, integræ; anticæ vix acutæ, margine exteriori perobliquo; posticæ margine exteriori truncato. *Mas.*—Antennæ pectinatæ. Abdomen alas posticas non superans. Alæ posticæ costa apicem versus subtruncata. *Fœm.*—Antennæ simplices. Abdomen alas posticas paullo superans, apice conicum. Alæ posticæ productæ, acutæ, costa apicali valde truncata.

*Male and female.* Body moderately stout. Front not tufted. Proboscis almost obsolete. Palpi porrect, short, extending a little beyond the head; third joint very minute. Antennæ rather short. Legs short, moderately stout. Hind legs a little thicker than the anterior legs; tibiæ not incrassated; spurs short. Wings long, entire. Fore wings hardly acute; exterior border very oblique. Hind wings with the exterior border somewhat truncated. *Male.*—Antennæ moderately pectinated. Abdomen not extending beyond the hind wings; apical tuft small. Hind wings with the apical part of the costa slightly truncated. *Female.*—Antennæ simple. Abdomen extending a little beyond the hind wings; tip conical. Hind wings prolonged and acute at the tips; apical part of the costa much truncated.

#### 1. CŒNINA PŒCILARIA.

*Læte lateritia; alæ nigro conspersæ, fascia interrupta maculari alba nigro marginata, margine interiore fimbriaque nigro alboque variis.*

*Geometra pæcilaria, Herr.-Sch. Exot. Schm. f. 192, 193.*

*a, b.* Zoolu Country. Presented by G. F. Angas, Esq.

*c—g.* Port Natal. From M. Gueinzius' collection.

#### Genus 52. ORSONOBA.

*Mas.* Corpus robustum. Frons non fasciculata. Proboscis distincta. Palpi crassi, porrecti, caput non longe superantes; articulus 3us conicus, parvus. Antennæ sat late pectinatæ, dimidio fere apicali simplici. Abdomen alas posticas paullo superans; fasciculus apicalis densus, quadratus. Pedes validi; tibiæ posticæ non incrassatæ, calcaribus sat longis. Alæ oblongæ; anticæ subtruncatæ, angulis duabus subapicalibus parvis, margine exteriori perobliquo, margine interiore excavato; posticæ costa excavata, margine exteriori vix dentato.

**Male.** Body robust. Front not tufted. Proboscis distinct. Palpi thick, porrect, extending not much beyond the head; third joint conical, minute. Antennæ rather broadly pectinated to beyond half the length, simple from thence to the tips. Abdomen extending a little beyond the hind wings; apical tuft thick, quadrate. Legs stout; hind tibiæ not incrassated; spurs moderately long. Wings oblong. Fore wings slightly truncated at the tips, behind which there are two slight angles; exterior border very oblique; interior border excavated. Hind wings with the costa excavated before the middle and towards the tip; exterior border hardly dentated.

1. *ORSONOBA RAJACA*.

**Mas.** *Cervina; alæ ferrugineæ subconspersæ, lineis duabus obliquis ferrugineis, subtus magis conspersæ flavo variæ lineis diffusis; anticæ lineis subrectis subparallelis apud costam nigricantibus retractis; posticæ lineis duabus subundulatis, gutta discali nigra albido punctata.*

**Male.** Fawn-colour. Wings minutely speckled with ferruginous; two ferruginous oblique lines; under side paler, more speckled, partly yellow and with diffuse lines. Fore wings with the lines nearly straight and parallel, blackish and abruptly retracted towards the costa. Hind wings with a black whitish-pointed dot on the interior line; the two lines slight, undulating. Length of the body 7 lines; of the wings 16 lines.

a. Ceylon. Presented by R. Templeton, Esq.

## Addenda to the Urapterydæ and to the Ennomidæ.

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### Page 8.

#### URAPTERYX FLAVIFIMBRIA.

*Male.* Antennæ short, pectinated. Fore wings less acute than those of the female. Hind wings with a much less prominent angle.

*b.* St. Domingo. From Mr. Tweedie's collection.

*c.* St. Domingo. From Mr. Hearse's collection.

### Page 10.

#### URAPTERYX PALINDIARIA.

*Mas.* *Pallide cervina; vertex albidus; antennæ subpubescentes; tibiæ posticæ valde incrassatæ et fasciculatæ; alæ linea fusca recta obliqua albido interlineata antice obsoleta; anticæ acutæ, puncto discali nigro; posticæ linea marginali albida, caudis brevissimis nigro strigatis.*

*Male.* Pale fawn-colour. Vertex whitish. Antennæ minutely pubescent. Hind tibiæ much incrassated and densely tufted. Wings with a straight oblique brown whitish-interlined line, which extends from the middle of the interior border of the hind wings and ceases at some distance from the tips of the fore wings; under side thinly and very minutely speckled with black. Fore wings acute, with a minute black discal point. Hind wings subcaudate; the tails and the adjoining fore part of a whitish line along the exterior border streaked with black. Length of the body 8 lines; of the wings 20 lines.

Brazil. In Mr. Saunders' collection.

## Page 20.

## CHÆRODES SUBCLARARIA.

**Fœm.** *Albida, cervino pullidissimo subincta; palporum articulus 3us cylindricus, 2i dimidio brevior; tibiæ posticæ incrassatæ, subfasciculatæ; alæ fusco subconspersæ, linea undulata submarginali e punctis fuscis, fasciis duabus obliquis diffusis indeterminatis cervinis, linea subtus submarginali fusca nigro punctata; anticæ subfalcatæ, linea interiore e punctis fuscis, margine exteriori subangulato; posticæ marginis exterioris angulo bene determinato.*

**Female.** Whitish, slightly tinged with very pale fawn-colour. Third joint of the palpi cylindrical, less than half the length of the second. Hind tibiæ incrassated, with a slender tuft. Wings minutely and indistinctly brown-speckled, with an undulating submarginal line of brown points; two oblique diffuse irregular fawn-coloured bands; under side shining white, with the submarginal points black and slightly connected by a brown line; fringe with black points, which are paler and fewer on the upper surface. Fore wings subfalcate, with an interior line of brown points; exterior border slightly angular. Hind wings with the exterior border distinctly angular. Length of the body 7 lines; of the wings 18 lines.

**a. St. Domingo.** From Mr. Tweedie's collection.

## Page 27.

## CHÆRODES COMPLETARIA.

**Fœm.** *Pallidissime cervina; caput fuscescens; tibiæ posticæ subincrassatæ; alæ amplæ, nigro subconspersæ, linea recta obliqua integra purpurascens-fusca albido interlineata, puncto discali nigro; anticæ falcatæ, margine exteriori recto; posticæ margine exteriori subcaudato.*

**Female.** Very pale fawn-colour. Head and palpi brownish; third joint of the latter very short. Hind tibiæ very slightly incrassated. Wings very ample, minutely black-speckled, with a straight oblique complete purplish brown line, which is interlined with whitish cinereous, and is obsolete on the under side; discal point black. Fore wings falcate; costa slightly convex; exterior border

quite straight. Hind wings with the exterior border subcaudate or with a very prominent angle; interior angle developed. Length of the body 7 lines; of the wings 12 lines.

- Rio Janeiro. In the collection of the Rev. Hamlet Clark.

#### CHÆRODES? CONTEMNARIA.

**Fœm.** *Albido-cinerea; palpi breves, porrecti, articulo 3o minimo; tibiæ posticæ subincrassatæ; alæ vix amplæ, extus cervino pallido subinctæ, linea exteriorè undulata obliqua e punctis fuscis strigas albas emittentibus, fascia exteriorè pallidissime viridescente vix conspicua; anticæ acutæ, vix falcatæ, margine exteriorè vix angulato; posticæ margine exteriorè subdentato.*

**Female.** Whitish cinereous. Palpi short, porrect; third joint extremely small. Hind tibiæ slightly incrassated. Wings hardly ample; exterior part slightly and very obliquely tinged with pale fawn-colour; an undulating oblique exterior line of brown points, which emit minute white streaks, and are slightly connected by an almost obsolete line, the latter being accompanied by an equally indistinct and very pale green band. Fore wings acute, hardly falcate; exterior border hardly angular. Hind wings with the exterior border very slightly scalloped; interior angle prominent. Length of the body 7 lines; of the wings 18 lines.

Brazil. In Mr. Saunders' collection.

#### CHÆRODES? ATROPESARIA.

**Mas.** *Alba, cervino pallidissime subincta, subtus candida; palpi porrecti, breves, sat graciles, articulo 3o minimo genua; nigro punctata; tibiæ posticæ subincrassatæ; alæ amplæ, lineis duabus indistinctis indeterminatis obliquis obscurioribus fusco punctatis, linea subtus submarginali e punctis nigris; anticæ vix falcatæ, linea interiorè strigaeque discali obscurioribus, margine exteriorè vix angulato; posticæ marginis exterioris angulo bene determinato, margine interiorè fimbriato.*

**Male.** White, with a slight dull ochraceous or very pale fawn-coloured tinge, pure white beneath. Palpi porrect, short, not stout; third joint very minute. Antennæ stout. Knees with black points; hind tibiæ slightly incrassated. Wings ample, with two indistinct diffuse irregular oblique brown-pointed lines; under side slightly

iridescent, with a submarginal line of black points. Fore wings hardly falcate, with a discal streak and an interior line; exterior border hardly angular. Hind wings with a distinct angle; interior border fringed; interior angle prominent. Length of the body 7 lines; of the wings 18 lines.

1. Bogotá. From Mr. Stevens' collection.

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OXYDIA? NERISARIA.

*Fœm.* *Candida, gracilis, subiridescens; tibiæ posticæ vix incrassatæ; alæ amplæ, e atomis nigris vix bifasciatæ, linea tenui recta obliqua exteriori lineaque marginali fuscis, linea subtus undulata fusca nigro punctata; anticæ subfalcatæ, peracutæ, gutta discali nigra, costa nigricante conspersa subtus cervina.*

*Female.* White, slender, shining, slightly iridescent. Head wanting. Hind tibiæ very slightly incrassated. Wings ample, slightly partially and very minutely blackish-speckled; the speckles mostly in two bands and along the costa of the fore wings; a slender straight oblique brown line, which is obsolete towards the costa; marginal line brown; under side with an undulating brown line, which is mostly distinguished by black points on the veins; marginal line very distinct. Fore wings subfalcate, very acute; a black discal dot; under side thickly speckled towards the base and along the costa, which is fawn-colour. Hind wings with the interior angle prominent. Length of the body 6 lines; of the wings 18 lines.

Amazon Region. In Mr. Saunders' collection.

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Genus ANDANIA.

*Mas.* Corpus sat robustum. Frons producta. Proboscis distincta. Palpi pilosi, parvi, oblique ascendentes, articulo 3o minimo; antennæ subsetulosæ. Pedes pilosi, breviusculi, tibiis posticis subincrassatis. Alæ amplæ; anticæ valde falcatæ, margine exteriori convexo antice excavato; posticæ angulatæ, apud angulum interiorem quadratæ.

**Male.** Body rather stout. Frontal tuft somewhat prominent. Proboscis moderately long. Palpi pilose, obliquely ascending, not stout nor long; third joint very minute. Antennæ minutely setulose. Legs pilose, rather short; hind tibiæ slightly incrassated. Wings very ample. Fore wings very falcate; exterior border deeply excavated behind the tips, its hind part convex; interior angle prominent. Hind wings extending much beyond the abdomen; exterior border forming a very distinct angle in the middle, its hind part forming a right angle with the interior border.

#### ANDANIA SCRIPTIPENNARIA.

**Fœm.** *Fuscescente-cinerea; alæ nigro subconspersæ, fascia diffusa olivacea undulata extus nigricante marginata, spatio exteriori ex parte nigricante nebuloso fascias duas olivaceas incompletas includente; anticæ valde falcatæ, linea interiore nigricante valde arcuata, litura discali vitrea Z-formi, costa convexa, margine exteriori inciso; posticæ abdomen longe superantes, puncto discali vitreo, margine postico angulato.*

**Female.** Brownish cinereous, more cinereous beneath. Wings minutely speckled with black, with a diffuse olive-green irregularly undulating band, bordered with blackish on the outer side; exterior space partly blackish-shaded, and containing two irregular and incomplete olive-green bands. Fore wings extremely falcate, with an interior much curved blackish line; a vitreous somewhat Z-shaped discal mark; costa convex; exterior border slightly convex, notched behind the tips; under side blackish brown along the exterior border. Hind wings extending far beyond the abdomen, with a vitreous discal point; exterior border forming a slightly obtuse angle in the middle. Hind tibiæ slightly tumid. Length of the body 7 lines; of the wings 21 lines.

a. Venezuela. From Mr. Dyson's collection.

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*Erase* \* Palporum articulus 3us brevis. 24. ENDROPIA, Guen.



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## DREPANODES ARNATARIA.

**Mas.** *Læte flava, subtilus lutescens; caput obscure fuscum; antennæ subpubescentes; abdominis fasciculus apicalis longus, albus, sericeus; alæ linea obliqua subarcuata læte rufa, fimbria ochracea, fascia subtilis nigra; anticæ falcatae, linea interiore ochracea tenui subarcuata, puncto discali nigro, spatio marginali rufescente, macula apicali nigra, punctis paucis subapicalibus albis nigro signatis.*

**Male.** Bright yellow, more luteous beneath. Head dark brown. Antennæ minutely pubescent. Abdomen with a long white silky apical tuft. Hind tibiæ slightly incrassated. Wings with an oblique slightly curved bright red line, which, on the fore wings, ends in a black apical dot, near which it is accompanied by a few white black-marked points; fringe ochraceous; under side with a black band corresponding to the red line above. Fore wings falcate, with a slight curved interior ochraceous line, a black discal point and a white costal subapical dot; space beyond the line and between the fore part of the line and the costa dull reddish; exterior border slightly concave in front. Hind wings with a dull reddish band along the exterior side of the line. Length of the body 11 lines; of the wings 12 lines.

Brazil. In Mr. Fry's collection.

## DREPANODES EXCAVARIA.

**Fœm.** *Rufescente-cinerea; caput et thorax anticus albida; tibiæ posticæ non incrassatæ; alæ nigro subconspectæ, linea albida recta obliqua intus ferrugineo extus nigricante marginata, apicibus nigricantibus, puncto discali nigro; anticæ valde falcatae, linea interiore tenui arcuata denticulata.*

**Female.** Reddish cinereous. Head and fore part of the thorax whitish. Hind tibiæ not incrassated. Wings minutely black-peckled, with a straight oblique whitish line, which is bordered with ferruginous on the inner side and with blackish on the outer side; the latter hue most apparent towards the blackish tips of the fore wings; a black discal point on each wing; fringe ferruginous. Fore wings very falcate, with a slight interior curved and denticulated line. Length of the body 5 lines; of the wings 14 lines.

Brazil. In Mr. Saunders' collection.

## DREPANODES APERTABIA.

**Mas.** *Pallide testacea, subtus luteo-flava; caput ferrugineo-fuscum; antennæ pectinatæ, apice simplices; thoracis marginis anticus albidus; alæ subconspersæ, linea fusca lata recta obliqua, lituris lincisque duabus subtus rufis; anticæ obtusè subfalcatæ, margine exteriori fusciscente, strigis duabus costalibus obliquis fuscis, 2a albo interlineata guttaque subapicali fusca contiguâ, guttis submarginalibus nigris; posticæ lineâ albido interlineata.*

**Male.** Pale testaceous, luteous-yellow beneath. Head ferruginous-brown. Antennæ pectinated, bare towards the tips. Fore border of the thorax whitish. Hind tibiæ not incrassated. Wings very slightly speckled; a broad straight oblique brown line, which is interlined with whitish in the hind wings; under side much speckled with red, with two conspicuous red lines, the inner one in the fore wings joining the outer one, which is there marginal. Fore wings obtusely subfalcate, brownish along the exterior border with two oblique brown costal streaks, the outer one interlined with white and contiguous to a nearly apical brown dot; some black submarginal dots. Length of the body 5 lines; of the wings 1 1/2 lines.

Brazil. In Mr. Saunders' collection.

## DREPANODES GRATA.

**Mas.** *Saturate ochracea, subtus læte lutæa; antennæ subserratæ, abdomen attenuatum, acuminatum; tibiæ posticæ non incrassatæ; alæ linea nigricante recta obliqua extus glauco marginata, lituris fuscisque duabus subtus rufis; anticæ vix productæ vix falcatæ, linea interiore nigricante valè undulata, linea exteriori apud costam angulata, fascia submarginali glauca nitente apud costam alba postice testacea; posticæ fascia submarginali lata testacea.*

**Male.** Deep ochraceous, bright luteous beneath, where the wings are varied with red and have two red bands, the outer one broad and marginal. Antennæ very minutely serrated. Abdomen attenuated towards the tip, which is very acute. Hind tibiæ not incrassated. Wings with a straight oblique blackish line which is glaucous-bordered exteriorly. Fore wings prolonged to

ends the tips, which are hardly falcate; a very serpentine blackish anterior line; exterior line forming an acute subcostal angle, accompanied by a submarginal band, which is shining white on the costa and testaceous at the other end. Hind wings with the very broadly-bordered with testaceous exteriorly. Length of body 5 lines; of the wings 13 lines.

**Anal.** In Mr. Saunders' collection.

### DREPANODES DIFFUNDARIA.

**Mas.** *Flavescente-cervina, subtus lutea; caput et thorax sordide cervina; antennæ subpubescentes; tibiæ posticæ subincrassatæ, subsulcatæ; alæ atomis, linea recta obliqua fimbriaque ferrugineis; anticæ productæ, costa ferruginea, linea apud costam subarcuata; posticæ margine exteriori flexo.*

**Male.** Yellowish fawn-colour, luteous beneath. Head and thorax dingy fawn-colour. Antennæ very minutely pubescent. Abdomen tufted at the tip. Hind tibiæ slightly incrassated and bowed. Wings speckled with ferruginous; a ferruginous straight oblique line, red on the under side; fringe ferruginous. Fore wings reduced towards the tips, ferruginous along the costa; exterior border very straight; line slightly curved towards the costa. Hind wings with a more exterior line, which is distinct beneath, but hardly visible above; exterior border bent. Length of the body 5 lines; of the wings 12 lines.

**Anal.** In Mr. Saunders' collection.

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### PYRINIA? JCOSIATA.

**Mas.** *Sordide ochracea, subtus læte ochracea; caput et thorax rufescente-ferruginea; antennæ subpubescentes; abdominis latera apicem versus fasciculata; tibiæ posticæ incrassatæ; alæ rufescente-ferrugineo conspersæ et suffusæ, linea recta obliqua diffusa fimbriaque concoloribus; anticæ vix acutæ, maculis duabus costalibus obliquis fuscis; posticæ linea exteriori dilatata.*

**Male.** Dull orange above, bright orange beneath. Head and thorax reddish ferruginous. Antennæ minutely pubescent. Abdomen tufted on each side towards the tip. Hind tibiæ incrassated.

Wings speckled and partly suffused with reddish ferruginous, which hue forms a diffuse straight oblique line; fringe reddish ferruginous. Fore wings hardly acute, with two oblique brown costal spots; exterior border hardly convex. Hind wings with an exterior line, which is partly dilated to the exterior border. Length of the body  $3\frac{1}{2}$  lines of the wings 9 lines.

*a. Ega.* From Mr. Bates' collection.

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**PYRINIA PRUSIASARIA.**

Rio Janeiro.

**PYRINIA AGONISARIA.**

*Mas.* *Luteo-flava, rufo-glauescente dense conspersa; palpi porrecti graciles, caput paullo superantes; antennæ pubescentes; tibiæ posticæ subincrassatæ; alæ anticæ apice subrotundatæ, marginis exterioris recto perobliquo; posticæ margine exteriori convexo.*

*Male.* Luteous-yellow, thickly and largely speckled with glaucous-tinged red; this hue in the wings forms two oblique bands which are most concise on the under side. Palpi porrect, slender extending a little beyond the head; third joint minute. Antennæ pubescent. Hind tibiæ slightly incrassated. Fore wings rounded at the tips; costa and exterior border straight; the latter very oblique. Hind wings with a convex exterior border. Length of the body 5 lines; of the wings 11 lines.

*a. Parâ.* From Mr. Bates' collection.

**PYRINIA TEGULARIA.**

*Mas.* *Luteo-flava; caput ochraceum; palpi porrecti; thorax nigricante fasciatus; tibiæ posticæ valde incrassatæ; alæ fuscæ conspersæ, fasciis duabus obliquis subparallelis sordide ochraceis, 1a subundulata, 2a chalybæo tincta subtus nigro-fuscis punctis subtus marginalibus nigris; anticæ apice rotundata margine exteriori recto perobliquo; posticæ puncto discali nigricante.*

*Male.* Luteous-yellow. Head more ochraceous; frontal tubercle prominent. Palpi porrect. Thorax with a blackish band in front.

Hind tibiae much incrassated. Wings brown-speckled, with two oblique nearly parallel dull ochraceous bands; interior band chalybeous-tinged; under side with the exterior band blackish brown and very distinct, and with marginal black points. Fore wings rounded at the tips; costa and exterior border straight, the latter very oblique; fringe blackish beneath in front. Hind wings with a blackish discal point, which is most distinct beneath. Length of the body 5 lines; of the wings 12 lines.

a. St. Domingo. From Mr. Tweedie's collection.

#### PYRINIA? MADIARIA.

*Mas.* *Rufescente-ferruginea, subtus ochracea; palpi brevissimi; antennae graciles, subsetulosae; abdomen breve; tibiae posticae robustae, non incrassatae; alae e strigulis transversis nigris sublineatae, linea una recta obliqua magis determinata, fimbria saturate rufescente-ferruginea; anticae obtusae, subfalcatae, margine exteriori antico subexcavato; posticae angulo interiore subproducto.*

*Male.* Reddish ferruginous, ochraceous beneath. Palpi very short. Antennae slender, very minutely setulose. Abdomen rather short. Hind tibiae stout, not dilated. Wings with minute transverse black streaks, which form irregular and interrupted lines, and one more distinct straight oblique line; fringe deep reddish ferruginous. Fore wings obtusely subfalcate, slightly excavated behind the tips. Hind wings slightly truncated at the tip; interior angle rather prominent. Length of the body 3 lines; of the wings 10 lines.

This species differs considerably from the other *Ennomidae*, and may form a new genus.

Amazon Region. In Mr. Saunders' collection.

#### PYRINIA MEPHASARIA.

*Mas.* *Læte lutea; caput et thorax anticus rufescentia; antennae subpubescentes; tibiae posticae vix incrassatae; alae elongatae, subconsersae, linea rufescente recta obliqua intus diffusa, guttis paucis submarginalibus indeterminatis; anticae acutae, punctis subcostalibus guttaque discali, margine exteriori recto perobliquo.*

**Male.** Bright pale luteous. Head and fore part of the thorax reddish. Antennæ very minutely pubescent. Hind tibiæ hardly incrassated. Wings elongate, more speckled on the under side than above; a reddish straight oblique line, which is diffuse on the inner side, and especially so towards the costa of the fore wings; a few irregular submarginal dots. Fore wings acute, with a few subcostal points and a discal dot; exterior border straight, very oblique. Hind wings with a prominent interior angle. Length of the body 6 lines; of the wings 16 lines.

Rio Janeiro. In Mr. Fry's collection.

### PYRINIA ALCANDRARIA.

**Mas.** *Sordide luteo-flava; antennæ subserratae, subpubescentes; abdominis fasciculus apicalis minimus; tibiæ posticæ subincrassatae; alæ strigis lineaque indistincta ferrugineis, colore subtilius lætiore magis consperso; antica subacuta, lineis duabus apud costam dilatatis, 2a valde incompleta, maculis duabus posticis submarginalibus unaque costali subapicali nigris, fimbria ferruginea; posticæ macula apicali nigra, fimbria apicali ferruginea.*

**Male.** Dull luteous yellow, brighter and more distinctly speckled on the under side. Antennæ very minutely serrated and pubescent. Abdomen with a very small apical tuft. Hind tibiæ slightly incrassated. Wings transversely streaked with ferruginous; an indistinct line of the same hue very incomplete on the fore wings, where it is dilated on the fore part of the disk and on the costa. Fore wings slightly acute, with an interior line, which is dilated on the costa; three black spots, one costal and subapical, the other two hindward and submarginal; exterior border straight; fringe ferruginous. Hind wings with a black spot at each tip, where the fringe is ferruginous. Length of the body  $4\frac{1}{2}$  lines; of the wings 12 lines.

Rio Janeiro. In Mr. Fry's collection.

### Genus CORYMICA.

**Fœm.** Corpus sat robustum. Proboscis tenuis. Palpi subdeclives, caput superantes; articulus 2us robustus; 3us gracilis, lanceolatus, 2i dimidio non longior. Antennæ graciles. Abdomen alas posticas paullo superans. Pedes sat validi; tibiæ posticæ non

dilatatae. Alae amplae, margine exteriori denticulato; anticae valde acutae, cysta magna basali, margine interiore subconcavo; posticae margini interiore penicillato.

*Female.* Body moderately stout. Proboscis feeble. Palpi slightly declining, extending somewhat beyond the head; second joint stout; third slender, lanceolate, hardly half the length of the second. Antennae slender. Abdomen extending a little beyond the hind wings. Legs moderately stout; hind tibiae not dilated. Wings ample; exterior border denticulated. Fore wings very acute, with a large basal cyst; interior border slightly concave exteriorly. Hind wings with a delicate fan-shaped tuft on the middle of the interior border.

#### CORYMICA ARNEARIA.

*Form.* Laete flava; corpus subtus album; caput et thorax anticus rufescentia, albido conspersa; alae rufescente subconspersae, puncto discali nigricante, margine exteriori rufescente, fimbria alba basi fusca, guttis subtus albidis rufescente marginatis; anticae costa basali rufescente albido conspersa, costa exteriori nigro conspersa, striga marginali antica rufa lata, maculis apud marginem interiorem duabus albis fusco marginatis unaque exteriori fusca.

*Female.* Very bright yellow. Body white beneath. Head and fore part of the thorax reddish, whitish-marked. Wings slightly reddish-speckled above, more speckled beneath, where there are several whitish reddish-bordered dots; exterior border mostly reddish; fringe white, dark brown at the base; a blackish discal point. Fore wings with the interior part of the costa reddish with white speckles; exterior part black speckled; a broad red streak on the fore part of the exterior border; two white brown-bordered spots, and an exterior brown spot on the interior border. Length of the body  $4\frac{1}{2}$  lines; of the wings 12 lines.

Sarawak, Borneo. In Mr Saunders' collection.

#### Genus LUXIARIA.

*Mas.* Corpus robustum. Proboscis valida. Palpi breves, validi, subascendentes, subangulati; articulus 3us conicus, parvus. Antennae subpubescentes. Abdominis fasciculus apicalis minimus. Pedes validi; tibiae posticae incrassatae. Alae amplae; fimbria brevis;

anticæ elongatæ, vix acutæ, margine exteriori recto perobliquo ; posticæ abdomen superantes, angulo interiore bene determinato.

*Male.* Body robust. Proboscis stout. Palpi short, stout, slightly ascending ; third joint conical, not more than one fourth of the length of the second, with which it forms an angle. Antennæ minutely pubescent. Abdomen with a very small apical tuft. Legs stout ; hind tibiæ incrassated. Wings ample ; fringe short. Fore wings elongate, hardly acute ; exterior border straight, very oblique. Hind wings extending beyond the abdomen ; interior angle prominent.

#### LUXIARIA ALFENUSARIA.

*Mas.* *Albido-testacea, fusco conspersa ; alæ fascia exteriori pallide fuscescente valde diffusa et indistincta subtus optime determinata lineam nigram angulosam includente, puncto discali nigricante ; anticæ costa cana, strigis duabus obliquis unaque exteriori obscuriore magis determinato fuscis.*

*Male.* Whitish testaceous. Body, legs and wings brown-speckled. Wings with a pale brownish very diffuse and indistinct exterior band, which is almost parallel to the exterior border ; fringe dark ferruginous ; under side with the band irregular, very distinct, containing a zigzag black line ; a blackish discal point ; costa of the fore wings hoary, with two brown oblique streaks, and with a darker and much more distinct exterior streak. Length of the body 6 lines ; of the wings 16 lines.

a. Sarawak, Borneo. From Mr. Wallace's collection.

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#### Genus DECETIA.

*Mas.* Corpus gracile. Frons plana. Proboscis tenuis. Palpi graciles, porrecti, caput perpaullo superantes ; articulus 3us cylindricus, 2i dimidio non longior. Antennæ latissime pectinatæ, apice simplices. Abdominis fasciculus apicalis quadratus. Pedes breves, validi ; tibiæ posticæ non incrassatæ. Alæ amplæ, fimbria brevi, angulo interiore bene determinato ; anticæ subfalcatæ, costa subconvexa, margine exteriori sat obliquo vix convexo ; posticæ abdomen longe superantes.

*Male.* Body slender. Front flat. Proboscis slight. Palpi slender, porrect, extending very little beyond the head ; third joint



cylindrical, about half the length of the second. Antennæ very broadly pectinated, simple towards the tips. Abdomen with a quadrate apical tuft. Legs short, stout; hind tibiæ not incrassated. Wings ample, fringe short; interior angle prominent. Fore wings subfalcate; costa slightly convex; exterior border rather oblique, hardly convex. Hind wings extending far beyond the abdomen.

This type has a resemblance to *Gynopteryx*, but differs widely from that genus in some characters.

### DEORTIA CAPETUSARIA.

*Mas.* *Rufescente-cinerea; alæ fusco conferte strigatæ, subtus cinereæ innotatæ, linea recta obliqua ferruginea, fascia exteriore fuscescente informi interrupta valde diffusa et indistincta, puncto discali fusco, fimbria ferruginea; anticæ linea apud costam angulata, punctis paucis anticis submarginalibus indistinctis albidis nigro notatis.*

*Male.* Reddish cinereous. Wings thickly, minutely and transversely brown-streaked; under side cinereous, without markings; a straight oblique ferruginous line, beyond which there is an irregular interrupted and very diffuse and indistinct brownish band; fringe ferruginous; a brown discal point. Fore wings with the line retracted, and forming an acute angle near the costa; a few indistinct whitish black-marked submarginal points in front. Length of the body 6 lines; of the wings 18 lines.

a. Hindostan. From the Entomological Society's collection.

b. Silhet. From the Rev. J. Stainforth's collection.

c. ———? Presented by E. Doubleday, Esq.

### Genus TACPARIA.

*Mas.* Corpus sat robustum. Frons subconvexa, fasciculo brevi acuto. Proboscis brevis. Palpi breves, subascendentes, caput vix superantes; articulus 3us conicus, minimus. Antennæ sat validæ, subpubescentes. Abdominis fasciculus apicalis minimus. Pedes validi; tibiæ posticæ incrassatæ. Alæ amplæ, margine exteriore convexo; anticæ subfalcatæ, costa vix convexa, margine exteriore subobliquo.

*Male.* Body moderately stout. Front slightly convex, with a short acute tuft. Proboscis short. Palpi short, slightly ascending,

hardly extending beyond the head; third joint conical, very short. Antennæ rather stout, very minutely pubescent. Abdomen with a very small apical tuft. Legs stout; hind tibiæ incrassated. Wings ample; exterior border convex. Fore wings subfalcate; costa hardly convex; exterior border slightly oblique.

#### TACPARIA ZALISSARIA.

Mas. *Cinereo-rufescens, nigro conspersa; alæ linea obscuriore diffusa obliqua valde indistincta punctisque contiguis nigris, fimbria apice cana; anticæ linea interiore e punctis nigris, puncto discali nigro.* Var.  $\beta$ .—*Alæ linea recta obliqua exterioriore albida.* Var.  $\gamma$ .—*Alæ fascia obscuriore indistincta extus angulosa intus diffusa.*

*Male.* Cinereous-reddish, minutely black-speckled, more cinereous on the under side. Wings with a diffuse oblique and very indistinct darker line, which is accompanied by black points; fringe tipped with hoary. Fore wings with an interior line of black points, and with a more distinct black discal point; these points much more distinct on the under side. Length of the body 6 lines; of the wings 16 lines.

Var.  $\beta$ .—Wings with a straight oblique exterior whitish line.

Var.  $\gamma$ .—Wings with a darker iridescent oblique exterior band, which is zigzag on the outer side and diffuse on the inner side.

a. Australia. From Mr. Milne's collection.

b. Sydney. From Mr. Lambert's collection.

c, d. ———?

Page 103.

For "Ilairaria," read "Nazadaria."

For "Opiteraria," read "Gaunaria."

Page 112.

#### APICIA? ÆPALIUSARIA.

Mas. *Pallide subtestaceo; caput fuscescens; palpi breves, lati, vix ascendentes; antennæ pectinatae, apice simplices; alæ latae, non longæ, nigro subconspersæ, linea exterioriore tenui obliqua subrecta ferruginea fusco punctata, fascia submarginali fuscescente diffusa indistincta, puncto discali nigro; anticæ acutæ, costa convexa, margine exterioriore vix obliquo.*

**Male.** Pale cinereous, with a slight testaceous tinge. Head and palpi brownish; the latter broad, short, hardly ascending. Antennæ pectinated, simple towards the tips. Wings broad, not long, minutely and irregularly speckled with black, with a slender oblique nearly straight exterior ferruginous line, which is marked by brown points; submarginal band brownish, diffuse, indistinct; exterior border hardly bent; discal point black. Fore wings acute, hardly subfalcate; costa and exterior border convex, the latter hardly oblique. Length of the body 6 lines; of the wings 15 lines.

Brazil. In Mr. Saunders' collection.

#### APICIA SIGNIFICARIA.

**Fœm.** *Cervina; palpi oblique ascendentes, subangulati, articulo 3o conico minimo; tibiæ posticæ vix incrassatæ; alæ amplæ, linea exteriorē fusca obliqua subrecta intus nigricante nebulosa extus testaceo marginata, puncto discali nigro, linea undulata submarginali e punctis nigris; anticæ acutæ, linea interiorē angulata indistincta, litura discali angulata alba nigro marginata, costa basi convexa extus subconcava, margine exteriorē vix flexo.*

**Female.** Fawn-colour, paler beneath. Palpi obliquely ascending; third joint conical, less than one-fourth of the length of the second, with which it forms a slight angle. Hind tibiæ hardly incrassated. Wings ample; exterior line brown, oblique, nearly straight, with a blackish shade on the inner side and concisely bordered with testaceous on the outer side; a black discal point and an undulating row of submarginal black points. Fore wings acute, with an indistinct angular interior line; exterior line angular near the costa; an angular white partly black-bordered discal mark; costa convex near the base, slightly concave exteriorly; exterior border hardly bent. Length of the body  $5\frac{1}{2}$  lines; of the wings 15 lines.

Rio Janeiro. In Mr. Fry's collection.

## APICIA INCRASSATA.

**Fœm.** *Testaceo-cinerea, crassa; palpi subascendentes, articulo 3 longi-conico; abdomen alas posticas paullo superans; tibiæ posticæ vix incrassatæ; alæ nigro fuscoque conspersæ, lineæ exteriorē recta obliqua nigricante intus fusco nebulosa extus albido marginata; anticæ acutæ, striga obliqua discali strigaque interiorē postica angulata nigris, margine exteriorē flexo posticæ subpallidiores.*

**Female.** Testaceous-cinereous, very robust. Palpi slightly ascending; third joint elongate-conical, full one-fourth of the length of the second. Abdomen extending a little beyond the hind wings. Hind tibiæ hardly incrassated. Wings black-and-brown speckled; exterior line straight, oblique, blackish, shaded with dark brown on the inner side and concisely bordered with whitish on the outer side; the brown hue not apparent on the hind wings. Fore wings acute, with an oblique black discal streak, and with an angular black streak hindward and nearer the base; exterior border distinctly bent. Hind wings a little paler than the fore wings. Length of the body 6 lines; of the wings 16 lines.

Rio Janeiro. In Mr. Fry's collection.

## APICIA? EXTIMARIA.

**Mas.** *Albido-cinerea, vix robusta; palpi fuscescentes, subascendentes, angulati, articulo 3o gracili cylindrico 2i dimidio longiore; antennæ pubescentes; abdominis fasciculus apicalis longiusculus; tibiæ posticæ incrassatæ; alæ tenues, nigro subconsersæ, puncto discali nigro, lineâ pallide fusca vix conspicua, fimbria alba nigro punctata.*

**Male.** Whitish cinereous, hardly stout. Palpi brownish slightly ascending; third joint slender, cylindrical, more than half the length of the second, with which it forms an angle. Antennæ pubescent. Abdomen with a rather long apical tuft. Hind tibiæ incrassated. Wings delicate, minutely black-speckled, with a black discal point and with a pale brown very indistinct line; fringe white, with black points opposite the veins. Length of the body 6 lines; of the wings 16 lines.

Rio Janeiro. In Mr. Fry's collection.

## APICIA ATILLARIA.

**Mas et form.** *Cinereo-cervina; palpi ascendentes, subangulati, articulo 3o brevissimo; antennæ simplices; alæ longiusculæ, nigro subconspersæ, linea exteriori recta obliqua ferruginea extus albido marginata, puncto discali nigro, linea submarginali undulata et punctis nigris, linea marginali pallida; anticæ acutæ, linea interiori arcuata, linea exteriori apud costam angulata, lunula discali alba.*

**Male and female.** Cinereous fawn-colour, more cinereous beneath. Palpi ascending; third joint minute, conical, less than one-fourth of the length of the second, with which it forms a slight angle. Antennæ simple. Wings moderately broad, rather long, very minutely speckled with black; exterior line straight, oblique, ferruginous, bordered with dingy whitish on the outer side; a black discal point; an undulating row of black submarginal points; marginal line dingy whitish; exterior border hardly bent. Fore wings acute, hardly subfalcate, with a curved interior line and with a white discal lunule; exterior line angular in front. Length of the body 6 lines; of the wings 17—18 lines.

Rio Janeiro. In Mr. Fry's collection.

## APICIA? DEDUCTABIA.

**Mas.** *Pallide cinereo-rufa, nigro dense conspersa; palpi porrecti, caput vix superantes; antennæ validæ, simplices, breviusculæ; tibiæ posticæ incrassatæ; alæ linea exteriori obliqua subrecta et punctis nigris albido notatis, fascia exteriori diffusa indistincta cinerea, puncto discali nigro; anticæ acutæ, margine exteriori subconvexo subobliquo; posticæ margine exteriori convexo.*

**Male.** Pale cinereous-red, thickly black-speckled. Frontal snout prominent. Palpi porrect, hardly extending beyond the head; third joint extremely minute. Antennæ stout, simple, rather short. Abdomen with tufted rather large apical valves. Hind tibiæ incrassated. Wings with an exterior oblique nearly straight line, which is formed of black whitish-marked points, and is accompanied by a diffuse and indistinct cinereous band; a black discal point. Fore wings acute; exterior border slightly convex and oblique. Hind wings with a convex exterior border. Length of the body 6 lines; of the wings 15 lines.

1. — ?

## APICIA? MOLUSARIA.

**Mas.** *Rufescente-cervina, gracilis; cinereo tincta, subtus pallid cinerea; palpi porrecti, graciles, brevissimi; antennæ simplices; tibiæ posticæ incrassatæ; alæ nigro subconspersa linea exteriore albida recta obliqua valde concisa, puncto discali nigro; anticæ apice rectangulatæ, linea exteriore apud costam biangulatæ, margine exteriore ante medium angulato; posticæ marginis exterioris angulo medio distinctissimo.*

**Male.** Reddish fawn-colour, slender, cinereous-tinged, palpi cinereous beneath. Palpi porrect, slender, very short, not extending beyond the head. Antennæ simple, rather stout. Abdomen with whitish-bordered segments; apical tuft rather long. Hind tibiæ incrassated. Wings slightly and very minutely black-speckled with a whitish straight oblique very concise exterior line, which forms two angles by the costa of the fore wings, and is there accompanied by a black spot; a black discal point. Fore wings acutely rectangular at the tips; an angle at a little beyond one-third of the length of the exterior border. Hind wings with the exterior border forming a very distinct middle angle. Length of the body  $5\frac{1}{2}$  lines; of the wings 12 lines.

Rio Janeiro. In Mr. Fry's collection.

## APICIA? ANSERARIA.

**Mas.** *Sordide testacea, fusco dense conspersa, purpurascente tincta, subtus cinereo suffusa; palpi porrecti, graciles, caput vix superantes; antennæ subpectinatæ; tibiæ anticæ brevissimæ, posticæ incrassatæ; alæ lineis duabus nigricantibus obliquis subparallelis, margine exteriore subflexo; anticæ subfalcatæ, linea interiore, costa apice convexa; posticæ margine exteriore vix dentato.*

**Male.** Dull testaceous, thickly and diffusedly brown-speckled, mostly dull purplish-tinged above, paler and cinereous-tinged beneath. Frontal tuft prominent. Palpi porrect, slender, extending very little beyond the head. Antennæ slightly pectinated. Fore tibiæ very short; hind tibiæ incrassated. Wings with two blackish oblique nearly parallel lines, of which the exterior one forms an acute angle near the costa of the fore wings; exterior border slightly bent. Fore wings subfalcate; costa convex towards the tip; an interior line which is nearly parallel to the middle one.

Hind? wings with the exterior border very slightly scalloped. Length of the body 5 lines; of the wings 12 lines.

Rio Janeiro. In Mr. Fry's collection.

#### APICIA? LIBERARIA.

*Fœm.* *Pallide rufescente-cervina, subtus pallide testacea; palpi porrecti, caput vix superantes; antennæ graciles; tibiæ posticæ non incrassatæ; alæ amplæ, nigricante substrigulatæ, lineis duabus mediis obliquis cinereis subparallelis vix undulatis, fimbria cinerea; anticæ subfalcatæ, lineis quatuor, 4a albido punctata, margine exteriori subconvexo subobliquo.*

*Female.* Pale reddish fawn-colour, pale testaceous beneath. Palpi porrect, hardly extending beyond the head; third joint extremely minute. Antennæ slender. Hind tibiæ not incrassated. Wings ample, slightly and transversely blackish-streaked, with two middle oblique cinereous nearly parallel hardly undulating lines; hinge cinereous. Fore wings subfalcate; costa straight; exterior border slightly convex and oblique, with an interior line which is nearly parallel to the two middle lines, and with an exterior one which is incomplete and whitish pointed. Wings beneath without lines, except three black subcostal dots, which indicate the exterior ones. Length of the body 6? lines; of the wings 14 lines.

1. ——— ?

#### APICIA? INFICITARIA.

*Mas.* *Pallide testacea, subtus lutescens; palpi porrecti, caput vix superantes; antennæ pectinatæ, apice simplices; tibiæ posticæ incrassatæ; alæ fusco subconspersæ, linea recta obliqua fuscescente, spatio exteriori purpurascente-cinereo; anticæ acutæ, puncto discali nigricante, linea interiori undulata diffusa purpurascente-cinerea, linea exteriori apud costam angulata, margine exteriori convexo; posticæ margine exteriori subflexo.*

*Male.* Pale testaceous, with a luteous tinge on the under side. Palpi porrect, hardly extending beyond the head; third joint extremely minute. Antennæ pectinated to nearly two-thirds of the length. Hind tibiæ incrassated. Wings minutely and transversely brown-streaked, with a straight oblique brownish line; space beyond the line mostly purplish cinereous. Fore wings acute, with blackish discal point and with an interior undulating diffuse

purplish cinereous line; exterior line forming a very abrupt sub-apical angle; exterior border convex. Hind wings with the exterior border slightly bent. Length of the body 5 lines; of the wings 14 lines.

Brazil. In Mr. Saunders' collection.

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EPIONE ALLUTUSARIA.

*Fœm.* *Lutea, ochraceo valde conspersa; alæ lineis duabus, 1a tenui flexa vix obliqua, 2a bene determinata subobliqua, spatio marginali postice purpurascens-fusco, punctis submarginalibus indistinctis nigris, margine exteriori subflexo; anticæ lunula gracili discali.*

*Female.* Luteous, thickly speckled with ochraceous, paler beneath. Wings with two blackish lines; the interior one slight, somewhat bent, nearly upright; the exterior one distinct, slightly oblique, curved in the hind wings; submarginal space suffused with purplish brown, except on the fore part of the fore wings; an indistinct row of submarginal black points; exterior border slightly bent; veins very distinct. Fore wings acute, with a slender discal lunule. Length of the body  $3\frac{1}{2}$  lines; of the wings 9 lines.

Brazil. In Mr. Saunders' collection.

EPIONE? ARDYSARIA.

*Fœm.* *Luteo-flava; frons plana; palpi fuscescentes; antennæ validæ; alæ ochraceo subconspersæ, linea exteriori nigra tenui vix arcuata extus rufo punctisque elongatis albis marginata, puncto discali nigro; anticæ acutæ, lineis duabus apud costam angulatis, costa margineque exteriori subconvexis; posticæ margine exteriori subflexo.*

*Female.* Luteous-yellow, paler beneath. Front flat. Palpi brownish. Antennæ stout. Hind tibiæ not incrassated. Wings thickly speckled with dull ochraceous; exterior line black, slender, hardly curved, bordered with red, and with elongated white points on the outer side; a black discal point. Fore wings acute; an interior line like the exterior one; both acutely angular near the costa, which, like the exterior border, is slightly convex. Hind wings with the exterior border slightly bent. Length of the body  $4\frac{1}{2}$  lines; of the wings 12 lines.

Rio Janeiro. In Mr. Fry's collection.



## EPIONE? MITRANARIA.

**Fœm.** *Flava; alæ ochraceo dense conspersæ, lineis tribus transversis fuscis valde arcuatis, 3a denticulata; anticæ costa marginæque exteriore convexis, linea basali strigæque obliqua subapicali, maculis duabus marginalibus cinereo-fuscis, 2a apud marginem interiorem producta, striga tenui discali; posticæ cinereo-fuscæ, basi spatiique postico marginali flavis, litura discali elliptica ferruginea fusco marginata.*

**Female.** Yellow, thickly speckled with ochraceous. Head wanting. Hind tibiæ not incrassated. Wings with three transverse much bent brown lines; the third denticulated; under side with the lines very indistinct. Fore wings convex along the costa and along the exterior border, with a basal line and a line proceeding from near the end of the costa to the middle of the exterior border; the latter with two cinereous-brown spots, of which one is prolonged along the interior border; first line emitting a fork inward; a slender discal streak. Hind wings cinereous-brown, except at the base and along the hind part of the exterior border; an elliptical ferruginous brown-bordered discal mark. Length of the body  $3\frac{1}{2}$  lines; of the wings 11 lines.

Brazil. In Mr. Saunders' collection.

## EPIONE RELIOTABIA.

**Fœm.** *Flava, sericea; antennæ sat robustæ; alæ ochraceo pallido dense conspersæ, linea fusca tenui recta subobliqua, punctis elongatis albidis, puncto discali fusco; anticæ vix acutæ, linea interiore subrecta non obliqua, linea exteriore apud costam angulata; posticæ margine exteriore subflexo.*

**Female.** Yellow, sericeous. Antennæ rather stout. Hind tibiæ not incrassated. Wings thickly speckled with pale ochraceous; a slender straight slightly oblique brown line, which is accompanied by elongated whitish points; a brown discal point. Fore wings hardly acute, with an erect nearly straight interior line; exterior line forming an acute angle near the costa. Hind wings with the exterior border slightly bent. Length of the body 4 lines; of the wings 12 lines.

Brazil. In Mr. Saunders' collection.

## Page 126.

## HYPERYTHRA? AGASUSARIA.

**Mas.** *Ferruginea; fasciculus frontalis brevissimus; palpi obliquæ ascendentes, articulo 3o minimo; abdomen cinerascens, fasciculo apicali fusco; tibiæ posticæ non incrassatæ; alæ latæ, non longæ, fusco strigatæ, subtus pallide cinereæ, fascia marginali lata rufescente, fuscis duabus obscurioribus diffusis valde indistinctis; anticæ apice rectangulatæ, costa pallidioræ, striga subapicali obliqua alba, linea media fusca arcuata sub-obliqua.*

**Male.** Ferruginous. Frontal tuft very short. Palpi obliquely ascending; third joint very minute. Antennæ moderately pectinated, simple towards the tips. Abdomen with a cinereous tinge; apical tuft thick, brown. Hind tibiæ not incrassated. Wings broad, not long, transversely streaked with brown, slightly tinged with purple; two darker diffuse and very indistinct bands; under side pale cinereous, with a broad marginal reddish band. Fore wings rectangular at the tips; costa paler; a white subapical streak between the costa and the exterior border; a brown curved slightly oblique line between the bands. Length of the body  $6\frac{1}{2}$  lines; of the wings 15 lines.

**a.** St. Domingo. From Mr. Tweedie's collection.

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## ANGERONA?? EXPULSARIA.

**Fœm.** *Sordide ochracea, gracilis, subtus pallide cinerea; caput et thorax anticus nigricante-cinerea; palpi robusti, brevissimi, oblique ascendentes; antennæ graciles; pedes longi, glabri, tibiis posticis non incrassatis, calcaribus longissimis; alæ amplæ, glauco subinctæ, nigro conspersæ, plagis exterioribus pallide luteis, lineis duabus indistinctis fuscescentibus undulatis; anticæ acutæ, costa nigricante-cinerea.*

**Female.** Dull ochraceous, slender, pale cinereous beneath. Head and fore part of the thorax blackish cinereous. Palpi stout, very short, obliquely ascending; third joint extremely minute. Antennæ slender. Legs long, smooth; hind tibiæ not incrassated; spurs very long. Wings ample, slightly glaucous-tinged, minutely black-speckled, with pale luteous spaces towards the exterior border;

no indistinct brownish irregularly undulating lines. Fore wings acute; costa blackish cinereous, hardly convex; exterior border slightly convex, moderately oblique. Length of the body 7 lines; of the wings 18 lines.

Rio Janeiro. In Mr. Fry's collection.

#### ANGERONA? POEUSARIA.

*Fœm.* *Albido-cinerea, robusta, subtus pallide lutea; caput et thorax anticus obscure fusca; tibiæ posticæ incrassatæ; alæ amplæ, fusco subconspersæ, lineis tribus fuscis subtus nigricantibus, 1a 2aque denticulatis undulatis, 3a recta extus albido-marginata; anticæ acutæ.*

*Female.* Whitish cinereous, stout, pale luteous beneath. Head and fore part of the thorax dark brown. Antennæ slender. Hind tibiæ incrassated. Wings very ample, minutely brown-speckled, with three brown lines, which are blackish and more distinct on the under side; first and second lines denticulated, undulating; third straight, whitish-bordered on the outer side, accompanied by some brown points, which are nearer the border, wholly blackish beneath; a brown spot between the first line and the base; exterior border convex. Fore wings acute. Length of the body 10 lines; of the wings 24 lines.

1. Hindostan. From the Entomological Society's collection.

#### ANGERONA? VICARIA.

*Fœm.* *Cinereo-testacea, robusta; palpi porrecti, brevissimi, caput vix superantes, articulo 3o longi-conico; antennæ graciles; abdomen alas posticas non superans, oviductu producto tubiformi; alæ nigro subconspersæ, litura discali tenui fusca, punctis exterioribus nigris, margine exteriori subflexo vix dentato; anticæ falcatæ.*

*Female.* Cinereous-testaceous, stout. Palpi porrect, very short, hardly extending beyond the head; third joint elongate-conical, nearly as long as the second. Antennæ slender. Abdomen extending as far as the hind wings; oviduct exerted, tubiform. Wings very minutely black-speckled, with a slender brown discal mark, and with an exterior line of black points which are on the

veins ; exterior border slightly bent in the middle, hardly scalloped. Fore wings falcate. Length of the body 10 lines ; of the wings 26 lines.

The specimen described is in bad condition, and the markings may have been partly obliterated.

a. West Africa. Presented by E. Doubleday, Esq.

#### ANGEBONA? AIMYLUSABIA.

**Mas.** *Cinereo-ferruginea; vertex planus; palpi erecti, caput paullo superantes; antennæ pectinatæ, apice simplices; alæ amplæ, strigis parvis lineaque obliqua vix undulata nigricantibus, margine exteriori convexo vix exciso; anticæ acutæ, linea 1a fusca obliqua subdenticulata extus testaceo marginata, 2a intus late testaceo marginata; posticæ spatio interiore testaceo strigis ferrugineis.*

**Male.** Cinereous-ferruginous, brownish cinereous beneath. Vertex flat. Palpi vertical, rising a little above the head; third joint very minute. Antennæ moderately pectinated, bare at the tips. Wings very ample, minutely and transversely blackish-streaked, with an oblique hardly undulating blackish line; exterior border convex, very slightly scalloped or dentate. Fore wings hardly acute, with an interior oblique slightly denticulated brown line, which is concisely testaceous-bordered on the outer side; exterior line largely testaceous-bordered on the inner side, and especially so towards the costa; exterior border moderately oblique. Hind wings from the base to the exterior line testaceous, thickly ferruginous-streaked. Length of the body 10 lines; of the wings 22 lines.

a. ———? Presented by E. Doubleday, Esq.

#### Genus LAGINIA.

**Mas et fœm.** Corpus robustum. Frons subproducta. Palpi oblique ascendentes, frontem paullo superantes; articulus 2us longus; 3us minimus. Antennæ validæ, maris pubescentes. Abdomen alas posticas non superans. Pedes robusti, glabri; tibiæ posticæ non incrassatæ. Alæ spissæ, amplæ, integræ, lituris metallicis, margine exteriori convexo; anticæ acutæ, costa vix convexa.

**Male and female.** Body stout. Front rather prominent. Proboscis moderately long. Palpi obliquely ascending, rising a

Head higher than the front; second joint long; third extremely minute. Antennæ stout, pubescent in the male. Abdomen not extending beyond the hind wings. Legs stout, not pilose; hind tibiae not incrassated. Wings stout, ample, entire; with metallic marks; exterior border convex; fringe full. Fore wings acute; costa very slightly convex; exterior border moderately oblique.

### LAGINIA BRACTEARIA.

*Fœm.* Late crocea; vertex fascia purpurascente-fusca; alæ lineis duabus æneis subparallelis, 2a marginali, spatio intermedio strigis transversis nigris, gutta discali nigra subtus conspicua, spatio marginali subtus purpurascente-cinereo; antica linea interiore ænea subarcuata non obliqua.

*Female.* Bright orange-colour, more luteous beneath. Vertex with a purplish brown band. Wings with two æneous nearly parallel lines; one exterior; the other marginal; space between the lines transversely black-speckled; under side with a black discal dot, which is slightly apparent above, and with a purplish cinereous tinge between the exterior line and the border. Fore wings with an æneous upright slightly curved interior line, which is continued along the costa to the base. Length of the body 5 lines; of the wings 14 lines.

a. Ceylon. Presented by R. Templeton, Esq.

### LAGINIA MARAXARIA.

*Mas.* Late crocea, subtus pallida; alæ luteæ, lineis plurimis diffusis indeterminatis croceis, fascia interiore recta obliqua nigra, linea exterior e guttis nigris chalybæo notatis, linea submarginali e lunulis chalybæis, linea marginali e punctis elongatis nigris.

*Male.* Bright orange, paler and more dull beneath. Wings luteous, with several irregular diffuse bright orange lines, and with a black straight oblique band; exterior line composed of black chalybeous-speckled dots; submarginal line of chalybeous lunules; marginal line of elongated black points; exterior border convex. Fore wings somewhat rounded at the tips; costa straight; exterior border moderately oblique. Length of the body 5 lines; of the wings 12 lines.

Sarawak, Borneo. In Mr. Saunders' collection.

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NEMATOCAMPA NYPARIA.

**Mas.** *Pallide flava; caput supra albidum; antennæ simplices; thorax antice fuscus; tibiæ posticæ vix incrassatæ; alæ breviusculæ, linea obliqua tenui albida, puncto discali nigro, margine exteriori angulato; anticæ fusco densè conspersæ, linea antice arcuata nigro punctata, costa basi fusca, apice rectangulato; posticæ fusco transverse strigatæ, linea recta, linea interiore ferruginea subundulata, gutta discali maculæque postica nigris.*

**Male.** Pale yellow. Head whitish above. Antennæ simple. Thorax brown in front. Hind tibiæ hardly incrassated. Wings rather short; line whitish, slender, oblique; black discal point distinct; exterior border distinctly angular. Fore wings thickly speckled with brown; line curved in front, with black points, of which the largest is costal; costa brown at the base; tips acutely rectangular. Hind wings transversely streaked with brown; line straight; an interior slightly undulating ferruginous line; a black spot near the interior angle and a black dot more in front, both equally distant from the white line. Length of the body 5 lines; of the wings 12 lines.

•Rio Janeiro. In Mr. Fry's collection.

Genus OMIZA.

**Mas.** Corpus sat robustum. Proboscis brevis. Palpi breves, ascendentes, non crassi; articulus 3us conicus, brevissimus. Antennæ late pectinatæ, apice simplices. Abdomen alas posticas non superans; fasciculus apicalis parvus, quadratus. Pedes validi; tibiæ posticæ non incrassatæ. Alæ longæ, amplæ; anticæ vix acutæ, costa recta, margine exteriori vix convexo valde obliquo.

**Male.** Body moderately stout. Proboscis short. Palpi short, not thick, applied to the head; third joint conical, less than one-fourth of the length of the second. Antennæ broadly pectinated, except at the tips. Abdomen not extending beyond the hind wings, with a small quadrate apical tuft. Legs stout; hind tibiæ not incrassated. Wings long, ample. Fore wings hardly acute; costa straight; exterior border hardly convex, very oblique.

## ✓ OMIZA PAQUIARIA.

**Mas.** *Luteo-flava*; caput et thorax anticus ochracea; palpi apice nigri; abdomen lineis duabus apiceque ochraceis; pedes antici nigri; alæ ochraceo conspersæ, linea ochracea recta obliqua; antica annulo discali ochraceo, macula submarginali maculaque apicali albido notata; posticæ linea subtus obsoleta.

**Male.** Luteous-yellow. Head and fore part of the thorax more ochraceous. Palpi with black tips. Abdomen with two lines and the tip ochraceous. Fore legs mostly blackish. Wings with various ochraceous speckles, which are most distinct on the under side; a straight oblique ochraceous line, which extends from near the tips of the fore wings to three-fourths of the length of the interior border of the hind wings. Fore wings with an ochraceous discal ringlet, with a submarginal spot, and with a whitish-marked apical spot; under side with the line much more distinct. Hind wings with the line obsolete on the under side. Length of the body 7 lines; of the wings 22 lines.

a. North Hindostan. From Mr. Stevens' collection.

## ✓ OMIZA PATULARIA.

**Mas.** *Ochraceo-cervina, gracilis, subtus late lutea*; frons ferrugineo-rufa; palpi porrecti, brevissimi; antennæ breves, subpectinatae; tibiæ posticæ subtumida; alæ longæ, amplæ, integræ, fusco subconsersæ, fimbria ferruginea; antica subfalcata, lineis tribus obliquis ferrugineis, 2a 3aque postice connexis, litura angulum versus obliqua nigra, costa nigro notata; posticæ bilineata.

**Male.** Ochraceous fawn-colour, slender, very bright luteous beneath. Front ferruginous-red. Proboscis short. Palpi porrect, stout, very short, not extending beyond the hind wings; third joint extremely minute. Antennæ short, slightly pectinated; branches setose. Legs rather slender; hind tibiæ slightly tumid. Wings long, ample, entire, slightly speckled with brown; fringe ferruginous. Fore wings subfalcate, with oblique ferruginous lines; first line near the base; second nearly parallel to the first, marked with black near the interior border; third much more slender and more oblique, connected with the second by the interior border, bent inward towards the costa; a slight oblique black mark near the

interior angle ; costa black-marked ; exterior border straight, rather oblique. Hind wings with two nearly straight very oblique ferruginous lines, which do not correspond with those of the fore wings. Length of the body 8 lines ; of the wings 24 lines.

*a.* North Hindostan. From Mr. Stevens' collection.

#### OMIZA ALEXONARIA.

*Mas.* *Saturate miniata, subtus cervina ; vertex et thorax anticus cinerei ; alæ nigro subconsersæ, lineis duabus nigricantibus diffusis indistinctis subarcuatis ; anticæ acutæ, apud costam purpurascente-cinereæ, linea 3a flexa, margine exteriori convexo.*

*Male.* Deep red lead-colour, sawn-colour beneath. Antennæ moderately pectinated almost to the tips. Vertex and fore part of the thorax dark cinereous. Wings minutely speckled with black ; two diffuse indistinct slightly curved blackish lines. Fore wings acute, tinged with purplish cinereous along the costa ; a bent more exterior line like the other two in appearance ; exterior border convex, less oblique than that of the typical species. Length of the body 9 lines ; of the wings 22 lines.

*a, b.* ——— ? From Mr. Milne's collection.

#### Genus LYCES.

*Mas.* Corpus robustum. Frons plana. Proboscis valida. Palpi porrecti, robusti, brevissimi ; articulus 3us minimus. Antennæ breves, latissime pectinatæ, apice simplices. Abdomen alas posticas superans. Pedes sat validi ; tibiæ anticæ breves, fasciculatæ ; posticæ non incrassatæ. Alæ amplæ ; anticæ apice rectangularatæ, margine exteriori angulato postice subconcavo ; posticæ margine exteriori convexo.

*Male.* Body robust. Front not prominent. Proboscis robust. Palpi porrect, stout, very short ; third joint extremely minute. Antennæ short, plumose or very broadly pectinated, simple for nearly one-third of the length from the tips ; branches slender, pubescent. Legs moderately stout ; fore tibiæ short, tufted ; hind tibiæ not incrassated. Wings ample. Fore wings elongated, rectangular at the tips ; exterior border forming an obtuse angle at less than one-third of its length from the tip ; the



hind part slightly concave. Hind wings with the exterior border convex.

### LYCES ATTESARIA.

**Mas.** *Luteo-flava; caput ochraceum; tibiæ anticæ tarsique fusca; alæ ochraceo subconspersæ, linea fusca obliqua subrecta apud apices dilatata albo guttata; posticæ linea submarginali undulata e punctis fuscis.*

**Male.** Luteous-yellow. Head and fore border of the thorax ochraceous. Tarsi and fore tibiæ brown. Wings minutely ochraceous-speckled, with an oblique nearly straight brown line, which is dilated and contains a white dot near the tips of the fore wings. Hind wings with an undulating submarginal row of brown points. Length of the body 8 lines; of the wings 22 lines.

♂. Congo. Presented by Sir J. Richardson.

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### ENDROPIA PROPRIARIA.

**Mas.** *Ochracea, fusco conspersa; palpi breves, oblique ascendentes; antennæ pectinatae, apice simplices; tibiæ posticæ incrassatæ; alæ amplæ, linea ferruginea obliqua subrecta, intus pallido marginata, fascia subtus ochracea undulata exteriori; anticæ subfalcatae, striga apicali lata obliqua pallida.*

**Male.** Ochraceous, brown-speckled, testaceous beneath. Palpi short, obliquely ascending; third joint very minute. Antennæ pectinated, except at the tips. Abdomen extending a little beyond the hind wings. Hind tibiæ much incrassated. Wings ample, with a ferruginous oblique nearly straight line, which is pale-bordered on the interior side, and is accompanied beneath by an ochraceous undulating band; exterior border bent. Fore wings subfalcate, with a broad oblique pale apical streak. Hind wings with the exterior border somewhat excavated in front. Length of the body 8 lines; of the wings 18 lines.

♂. New York. Presented by E. Doubleday, Esq.

angle in the middle. Hind wings transversely brownish-streaked ; interior angle prominent. Length of the body 6 lines ; of the wings 17 lines.

Brazil. In Mr. Saunders' collection.

#### CABERODES ? BILBISARIA.

*Fœm.* Cinerea, nigro conspersa ; caput et thorax ferruginea ; palpi graciles, oblique ascendentes, verticem non superantes ; alæ integræ, ferrugineo variæ, subtus ferrugineo late marginatæ ; anticæ acutæ, vix falcatæ, lineis duabus vix conspicuis lineæque exteriori subarcuata bene determinata ; posticæ lineis subobsoletis.

*Female.* Cinereous, minutely black-speckled. Head and thorax ferruginous, the former whitish between the antennæ. Palpi slender, obliquely ascending, not rising higher than the vertex ; third joint extremely minute. Antennæ whitish. Wings entire, tinged with ferruginous, which is most prevalent on the exterior part, and on the under side appears only in a broad marginal band. Fore wings acute, hardly falcate, with two very indistinct lines, and with an exterior very distinct line, which is slightly curved inward. Hind wings with the lines almost obsolete. Length of the body 6 lines ; of the wings 16 lines.

a. St. Domingo. From Mr. Tweedie's collection.

#### CABERODES ? AGREASARIA.

*Mas.* Ferruginea ; palpi porrecti, caput sat superantes, articulo 3o longiusculo ; antennæ pectinatæ ; tibiæ posticæ subincrassatæ ; alæ ferrugineo-cinereæ, integræ, nigricante conspersæ, gutta discali lineaque undulata exteriori nigricantibus ; anticæ acutæ, linea interiore strigaeque apicali obliqua nigricantibus.

*Male.* Ferruginous. Palpi porrect, extending rather far beyond the head ; third joint elongate-conical, about one-third of the length of the second. Antennæ rather broadly pectinated. Hind tibiæ slightly incrassated. Wings cinereous, entire, ferruginous-tinged, thickly blackish-speckled, somewhat ochraceous beneath ; a blackish discal dot and an undulating blackish exterior line. Fore wings acute, with an interior line, and with a blackish oblique apical streak ; exterior border hardly bent. Length of the body 6 lines ; of the wings 16 lines.

a. New York. Presented by E. Doubleday, Esq.

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TETRAOIS ALLEDIUSARIA.

*Fœm.* *Pallide testacea; palpi porrecti, caput vix superantes; alæ amplæ, longiusculæ, linea recta obliqua saturate ochracea, margine exteriori angulato; anticæ subfalcata, margine exteriori antice subconcavo postice recto perobliquo.*

*Female.* Pale testaceous. Palpi porrect, hardly extending beyond the head; third joint extremely minute. Antennæ simple. Wings ample, rather long, with a straight oblique deep ochraceous line. Fore wings subfalcate; costa straight; exterior border slightly concave in front of the distinct angle, its hind part straight and very oblique. Hind wings extending beyond the abdomen, with a less distinct angle. Length of the body 6 lines; of the wings 20 lines.

a. Jamaica. From Mr. Milne's collection.

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Genus DASMEUDA.

*Mas.* Corpus sat validum. Frons plana, glabra. Proboscis brevis, gracilis. Palpi graciles, glabri, porrecti, caput paullo superantes; articulus 2us fusiformis; 3us cylindricus, 2i dimidio longior. Antennæ breves, pectinatae. Abdomen alas posticas non superans. Pedes robusti, glabri; tibiæ posticæ vix incrassatæ. Alæ amplæ, angulo interiore producto, fimbria brevi; anticæ apice rectangulatæ, margine exteriori antice inciso.

*Male.* Body moderately stout. Front flat, smooth. Proboscis short, slender. Palpi slender, porrect, smooth, extending a little beyond the head; second joint fusiform; third cylindrical, much more than half the length of the second. Antennæ short, pectinated. Abdomen not extending beyond the hind wings. Legs stout, smooth; hind tibiæ hardly incrassated. Wings ample; interior angle prominent, fringe short. Fore wings rectangular at the tips; exterior border notched at one-third of the length from the tip, its hind part straight and rather oblique. Hind wings with the exterior border convex.

angle in the middle. Hind wings transversely brownish-streaked ; interior angle prominent. Length of the body 6 lines ; of the wings 17 lines.

Brazil. In Mr. Saunders' collection.

#### CABERODES ? BILBISARIA.

*Fœm.* Cinerea, nigro conspersa ; caput et thorax ferruginea ; palpi graciles, oblique ascendentes, verticem non superantes ; alæ integræ, ferrugineo variæ, subtus ferrugineo late marginatæ ; anticæ acutæ, vix falcatæ, lineis duabus vix conspicuis lineæque exteriore subarcuata bene determinata ; posticæ lineis subobsoletis.

*Female.* Cinereous, minutely black-speckled. Head and thorax ferruginous, the former whitish between the antennæ. Palpi slender, obliquely ascending, not rising higher than the vertex ; third joint extremely minute. Antennæ whitish. Wings entire, tinged with ferruginous, which is most prevalent on the exterior part, and on the under side appears only in a broad marginal band. Fore wings acute, hardly falcate, with two very indistinct lines, and with an exterior very distinct line, which is slightly curved inward. Hind wings with the lines almost obsolete. Length of the body 6 lines ; of the wings 16 lines.

a. St. Domingo. From Mr. Tweedie's collection.

#### CABERODES ? AGREASARIA.

*Mas.* Ferruginea ; palpi porrecti, caput sat superantes, articulo 3o longiusculo ; antennæ pectinatæ ; tibiæ posticæ subincrassatæ ; alæ ferrugineo-cinereæ, integræ, nigricante conspersæ, gutta discali lineaque undulata exteriore nigricantibus ; anticæ acutæ, linea interiore strigaque apicali obliqua nigricantibus.

*Male.* Ferruginous. Palpi porrect, extending rather far beyond the head ; third joint elongate-conical, about one-third of the length of the second. Antennæ rather broadly pectinated. Hind tibiæ slightly incrassated. Wings cinereous, entire, ferruginous-tinged, thickly blackish-speckled, somewhat ochraceous beneath ; a blackish discal dot and an undulating blackish exterior line. Fore wings acute, with an interior line, and with a blackish oblique apical streak ; exterior border hardly bent. Length of the body 6 lines ; of the wings 16 lines.

a. New York. Presented by E. Doubleday, Esq.

*lineis duabus fuscis, 1a flexa antice nigra, 2a recta obliqua, spatio intermedio flavescente, gutta discali alba fusco marginata; posticæ linea exteriori nigra undulata, gutta discali nigra subtilis conspicua, margine interiore albo.*

**Male.** Fawn-colour, paler and with a cinereous tinge beneath. Head with a white band between the antennæ, which are white beneath. Abdomen with a blackish dorsal stripe, which occupies the whole of the tip, and is deep black at the base. Legs whitish, black-speckled. Wings slightly black-speckled, with a row of black white-marked submarginal points. Fore wings with two brown lines; the intermediate space mostly yellowish; interior line slightly undulating, bent towards the costa, near which it is marked with black; exterior line straight, oblique, having near its inner side in front a white brown-bordered dot. Hind wings with a yellowish space beyond the hind part of the exterior line, which is black and undulating; discal dot black, most conspicuous beneath; a white stripe along the interior border. Length of the body 5 lines; of the wings 12 lines.

Rio Janeiro. In Mr. Fry's collection.

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SELENIA APAMARIA.

**Form.** *Cinerea, ferrugineo dense conspersa; fasciculus frontalis acutus; palpi rostriformes, subascendentes; alæ fasciis duabus albidis obliquis indeterminatis subtilis albis distinctis, linea fusca obliqua subrecta, linea marginali albida intus fusco marginata; anticæ obtusæ, plaga subtilis alba postica marginali, margine exteriori angulato antice concavo; posticæ dente bene determinato.*

**Female.** Cinereous, thickly ferruginous-speckled. Frontal tuft prominent, acute. Palpi rostriform, slightly ascending; third joint forming a very slight angle with the second. Wings with two whitish oblique irregular bands, which are quite white and more distinct on the under side; the whitish hue also appears at the tips, and on the under side there is a white patch on the hind part of the exterior border; a brown oblique nearly straight line, which is slightly interrupted by the veins; marginal line whitish, bordered with brown on the inner side. Fore wings obtuse at the tips; exterior border concave along the fore part of the angle. Hind wings

with the exterior border strongly dentate in the middle. Length of the body  $5\frac{1}{2}$  lines; of the wings 16 lines.

Tasmania. In Mr. Saunders' collection.

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AZELINA FUSARIA.

**Fœm.** *Cinereo-fusca; palpi breves, subascendentes, sat graciles; antennæ graciles; tibiæ posticæ non incrassatæ; alæ anticæ subfalcatæ, strigis fuscis transversis indistinctis, lineis fuscis, 1a undulata antice flexa, 2a obliqua albo punctata vix undulata, linea intermedia minus distincta, spatio medio ferrugineo, punctis submarginalibus nigris albo notatis, incisuris tribus marginalibus; posticæ subdentatæ, linea exteriori tenuissima fuscescente extus albido marginata, gutta subtus nigra elliptica discali pallido marginata, punctis subtus duobus marginalibus albis.*

**Female.** Cinereous-brown, ferruginous-cinereous beneath. Palpi short, not stout, slightly ascending. Antennæ slender, simple. Head with a whitish transverse line between the antennæ. Hind tibiæ not incrassated. Fore wings subfalcate, with indistinct transverse brown streaks; lines brown; interior line undulating, abruptly reflexed in front; exterior line oblique, hardly undulating, marked with white points, almost parallel to a less distinct line near its inner side; the intermediate space ferruginous; a few black white-marked submarginal points; exterior border with three excavations. Hind wings slightly dentate hindward, with a very slight brownish exterior line, which is whitish-bordered on the outer side; under side with a black elliptical pale-bordered discal dot and with two marginal white points. Length of the body 6 lines; of the wings 16 lines.

Brazil. In Mr. Saunders' collection.

AZELINA? GABRABIA.

**Mas.** *Cinereo-rufescens, gracilis; palpi ascendentes, breves, graciles; antennæ subpubescentes; tibiæ posticæ incrassatæ; alæ amplæ, fusco strigatæ, fasciis duabus subobsoletis, linea submarginali fusca subrecta albido extus marginata lineaque pallide iridescente contiguis, puncto discali nigro; anticæ acutæ, vix falcatæ; posticæ margine exteriori subflexo.*

**Male.** Cinereous-reddish, slender, cinereous beneath. Palpi ascending, short, slender. Antennæ very minutely pubescent. Hind tibiæ incrassated. Wings ample, transversely brown-streaked, with two almost obsolete bands, and with a brown nearly straight submarginal line, which is white-bordered on the outer side, where it is accompanied by a pale greenish line; discal point black. Fore wings acute, hardly falcate; exterior border very slightly bent. Hind wings with the exterior border slightly bent, hardly scalloped. Length of the body 7 lines; of the wings 16 lines.

a. Venezuela. From Mr. Dyson's collection.

#### AZELINA VARIARIA.

**Fœm.** *Ferrugineo-fusca; antennæ robustæ, simplices; abdomen alas posticas paullo superans; alæ subdentatæ; anticæ subpurpurascentes, nigro subconspersæ, guttis submarginalibus nigris, lineis duabus nigricantibus, 1a flexa informi, 2a obliqua subdentata intus fusco late marginata extus pallido marginata, striga discali lata ferruginea, litura discali nigra lunulata bene determinata; posticæ cinereo-fuscæ, linea exteriore fusca subdenticulata extus pallido marginata, punctis tribus marginalibus nigris, fasciculo subtus discali squamoso nigricante, guttis subtus marginalibus albis nigro notatis.*

**Female.** Ferruginous-brown. Abdomen and under side brownish cinereous. Antennæ stout, simple. Abdomen extending a little beyond the hind wings. Wings with the exterior border slightly dentate. Fore wings with a slight purplish tinge, thinly speckled with black, with two blackish lines and with submarginal black dots; interior line irregular, much bent in front and backward; exterior line oblique, slightly dentate, concisely pale-bordered on the outer side and largely brown-bordered on the inner side; the brown hue interrupted by a broad ochraceous streak; the latter extending from the blackish lunulate discal mark, which is very distinct. Hind wings cinereous-brown, with a brown slightly denticulated exterior line, which is pale-bordered on the outer side; three black marginal dots near the interior angle; under side with white black-marked marginal dots, and with a squamous blackish tuft in the disk. Length of the body 8 lines; of the wings 18 lines.

a. ———?

## AZELINA HONESTARIA.

**Mas.** *Cinereo-fusca; palpi breves, graciles, oblique ascendentes; antennæ validæ, subsetulosæ; tibiæ posticæ vix incrassatæ; alæ albido subconsersæ, spatio marginali pallido; margine exteriori subdentato subflexo, fimbria ferruginea; anticæ lineis duabus obscure fuscis, 1a antice flexa postice obsoleta, 2a obliqua undulata intus diffusa extus pallido marginata; posticæ linea exteriori tenui recta, punctis marginalibus nigris.*

**Male.** Cinereous-brown, more cinereous beneath. Palpi short, slender, obliquely ascending. Antennæ stout, minutely setulose. Abdomen not extending beyond the hind wings. Hind tibiæ hardly incrassated. Wings paler beyond the exterior line, minutely whitish-speckled; exterior border very slightly dentate and bent; fringe ferruginous. Fore wings with two dark brown lines; interior line bent in front, obsolete hindward; exterior line oblique, undulating, diffuse on the inner side, concisely pale-bordered on the outer side. Hind wings with a slight straight exterior line; four black dots along the hind part of the exterior border. Length of the body  $5\frac{1}{2}$  lines; of the wings 14 lines.

*a. — — ?*

## AZELINA? ARETARIA.

**Mas.** *Ferruginea, sat robusta; palpi porrecti, graciles, caput non superantes; antennæ subpectinatae; tibiæ posticæ non incrassatæ; alæ fuscescente-cinereæ, amplæ, integræ; anticæ apice subrotundatæ, lineis duabus nigricantibus, intermedio fusco, 1a valde angulata, 2a undulata obliqua extus albido marginata, litura discali albida, costa cervina; posticæ linea recta obliqua fusca.*

**Male.** Ferruginous, moderately stout, mostly cinereous beneath. Palpi porrect, slender, not extending beyond the head; third joint extremely minute. Proboscis rather long and stout. Antennæ slightly pectinated. Legs smooth; hind tibiæ not incrassated. Wings ample, entire, brownish cinereous. Fore wings somewhat rounded at the tips, with two blackish lines, which are diffuse on the intermediate brown space; interior line very deeply angular; exterior line undulating, oblique, whitish-bordered on the outer side; discal mark whitish; costa fawn-colour. Hind



wings with a straight oblique brown line. Length of the body 7 lines; of the wings 18 lines.

a. ———?

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### Genus LYRCEA.

*Fam.* Corpus sat validum, subcylindricum. Frons plana. Proboscis distincta. Palpi breves, graciles, vix ascendentes, caput perpaullo superantes; articulus 3us cylindricus, 2i dimidio brevior. Antennæ robustæ, simplices. Abdomen alas posticas non superans. Pedes robusti, non pilosi; tibiæ posticæ subincrassatæ. Alæ longæ, amplæ, margine exteriori subdentato; anticæ falcatæ, margine exteriori subflexo postice perobliquo.

*Female.* Body moderately stout, nearly cylindrical. Front flat. Proboscis distinct. Palpi short, slender, hardly ascending, extending very little beyond the head; third joint cylindrical, less than half the length of the second. Antennæ stout, simple. Abdomen not extending beyond the hind wings. Legs stout, not pilose; hind tibiæ slightly incrassated. Wings long, ample; exterior border slightly scalloped. Fore wings falcate; costa almost straight; exterior border slightly bent, its hind part very oblique; fringe short.

### LYRCEA ALECTORARIA.

*Fam.* *Cervina*; frons purpurascens-cinerea; alæ nigro subconspersæ, linea media obliqua nigricante indistincta, fimbria purpurascens-rosea; anticæ linea interiore valde indistincta, puncto discali nigro, costa cinerea, margine interiore fimbriato.

*Female.* Fawn-colour, paler and with a cinereous tinge beneath. Front purplish cinereous. Wings with a very indistinct blackish oblique middle line, and with a few black speckles; fringe purplish rosy. Fore wings with a still more indistinct interior line, and with a black discal point; costa cinereous; interior border fringed with pale rosy hairs. Length of the body 7 lines; of the wings 18 lines.

a. New Zealand. Presented by Col. Bolton.

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## METANEMA ÆLIARIA.

**Fœm.** *Pallide testacea; frons plana; palpi graciles, brevissimi; antennæ sat validæ; pedes robusti, tibiis posticis non incrassatis; alæ ochraceo subconspersæ, extus nigro conspersæ, linea fusca obliqua subrecta rufescente-marginata, linea adhuc exteriori undulata denticulata, puncto discali nigro; anticæ subfalcatæ, margine exteriori angulato, linea interiori subrecta vix obliqua apud costam dilatata, plaga apud angulum interiorem e squamis nigris; posticæ subdenticulatæ, valde angulatæ.*

**Female.** Pale testaceous, whitish testaceous on the under side. Front flat. Palpi slender, very short. Antennæ rather stout. Legs stout; hind tibiæ not incrassated. Wings indistinctly ochraceous-speckled, slightly black-speckled exteriorly; a brown oblique nearly straight line, reddish-bordered on the outer side; a more exterior undulating and denticulated line, which is most apparent on the under side; a black discal point. Fore wings subfalcate; exterior border concave on each side of its very distinct angle; a nearly straight and upright interior line, which is dilated on the costa; a patch of black speckles near the interior angle. Hind wings extending a little beyond the abdomen; exterior border slightly denticulated, with a very prominent angle in the middle. Length of the body 5 lines; of the wings 16 lines.

a. East Florida. Presented by E. Doubleday, Esq.

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## ENNOMOS? ARSESARIA.

**Fœm.** *Testaceo-albida; palpi oblique ascendentes, caput sat superantes, articulo 3o longi-conico; thorax dense vestitus; tibiæ posticæ vix incrassatæ; alæ amplæ, fasciis duabus obliquis undulatis subobsoletis vix obscurioribus, linea exteriori undulata e punctis nigris, margine exteriori angulato; anticæ subfalcatæ, costa apicem versus subconvexa.*

**Female.** Testaceous-whitish. Palpi obliquely ascending, extending some distance beyond the head; third joint elongate-conical, hardly one-third of the length of the second. Antennæ smooth. Thorax densely clothed. Legs smooth; hind tibiæ hardly incrassated.

sated. Wings ample, with two oblique undulating hardly darker almost obsolete bands; an exterior undulating line formed of very minute black points on the veins; exterior border distinctly angular. Fore wings subfalcate; costa slightly convex towards the tip. Hind wings with the interior border fringed; interior angle prominent. Length of the body 7 lines; of the wings 18 lines.

a. California.

### Genus BIZIA.

*Mas.* Corpus sat robustum. Frons plana. Proboscis brevis. Palpi breves, validi, subarcuati, vix ascendentes; articulus 3us minimus. Antennæ sat late pectinatæ, apice simplices. Abdomen alas posticas non superans. Pedes breviusculi, sat validi; tibiæ posticæ valde incrassatæ. Alæ amplæ, margine exteriori subdentato; anticæ acutæ, costa recta, margine exteriori vix flexo.

*Male.* Body moderately stout. Front not prominent. Proboscis short. Palpi short, stout, hardly ascending, slightly curved; third joint extremely minute. Antennæ rather broadly pectinated to three-fourths of the length. Abdomen extending as far as the hind wings; apical tuft diverging. Legs rather short and stout; hind tibiæ much incrassated. Wings very ample; exterior border slightly dentated. Fore wings acute; costa straight; exterior border hardly bent.

### BIZIA ÆXARIA.

*Mas.* Pallide lutea; caput ferrugineum; pedes antici fusci; alæ ochraceo subconspersæ, subtus fusco conspersæ, gutta subtus discali fusca; anticæ apud costam fusco notatæ, spatio marginali ferrugineo nigricante strigato et guttato; posticæ apice ochraceæ.

*Male.* Pale luteous. Head deep ferruginous. Fore legs mostly brown. Wings transversely and indistinctly speckled with ochraceous above, very distinctly speckled with brown beneath, where there is a brown discal dot. Fore wings marked with brown along the costa; marginal space obliquely and concisely ferruginous, transversely streaked with blackish, and containing some blackish dots. Hind wings ochraceous at the tips. Length of the body 9 lines; of the wings 21 lines.

a. North China. From Mr. Fortune's collection.

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## HIMERA? ABOPISARIA.

**Mas.** *Rufescente-ferruginea, robusta, nigro-conspersa, subtus ochracea; palpi porrecti, caput longe superantes, articulo 3o lanceolato; antennæ latissime pectinatae; abdomen alas posticas longe superans; alæ linea exteriori nigra obliqua; anticae apice rectangulatae, linea interiori nigra antice flexa, linea exteriori undulata, margine exteriori subflexo; posticae linea exteriori recta, margine exteriori subdentato.*

**Male.** Reddish, ferruginous, stout, thickly black-speckled, more ochraceous beneath. Palpi porrect, extending far beyond the head; second joint broad; third lanceolate, less than half the length of the second. Antennæ very broadly pectinated. Abdomen extending very far beyond the hind wings. Wings with a black oblique exterior line, which is diffuse on the inner side. Fore wings rectangular at the tips, with an interior black line, which is bent in front; exterior line undulating; exterior border slightly bent. Hind wings with the exterior line straight; exterior border slightly scalloped. Length of the body 8 lines; of the wings 16 lines.

a. South Africa From M. Becker's collection.

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## HALESA ÆNETUSARIA.

**Mas.** *Ochraceo-cervina; palpi graciles, vix ascendentes, caput perpaullo superantes, articulo 3o minimo; antennæ subpectinatae, apice simplices; abdomen alas posticas paullo superans; tibiæ posticæ incrassatae; alæ glaucescente tinctæ, linea exteriori albida obliqua subdenticulata; anticae valde falcatae, linea interiori tenui undulata, costa testacea, incisuris duabus marginalibus latis; posticae dentatae.*

**Male.** Ochraceous fawn-colour. Front prominent. Palpi slender, hardly ascending, extending a little beyond the head; third joint very minute. Antennæ slightly pectinated, except towards the tips. Abdomen extending a little beyond the hind wings. Hind tibiæ incrassated. Wings with glaucous reflections; under side more completely tinged with whitish reflections; a whitish oblique slightly denticulated exterior line. Fore wings very falcate,

with a slight interior undulating line; exterior line acutely angular towards the costa, straight on the under side; costa testaceous; exterior border with two broad excavations. Hind wings with the exterior border acutely and deeply dentate. Length of the body 6 lines; of the wings 14 lines.

Brazil. In Mr. Saunders' collection.

### Genus CHIZALA.

*Mas.* Corpus robustum. Proboscis brevis. Palpi breves, porrecti, caput non aut vix superantes; articulus 3us minimus. Antennæ latissime pecticatæ, apice simplices. Abdomen breves, non robusti; tibiæ posticæ non incrassatæ. Alæ amplæ, spissæ; anticæ elongatæ, valde falcatæ, costa extus convexa, margine exteriori antico excavato; posticæ subdentatæ.

*Male.* Body stout. Front not prominent. Proboscis short. Palpi short, porrect, extending not or very little beyond the head; third joint very minute. Antennæ very broadly pectinated, bare towards the tips. Abdomen not extending beyond the hind wings. Legs short, not stout; hind tibiæ not incrassated; spurs long. Wings ample, stout. Fore wings elongate, very falcate; costa convex exteriorly; exterior border excavated behind the tips. Hind wings with the exterior border slightly dentate.

### CHIZALA DECIPIENS.

*Mas.* *Rufescens-cervina, robusta; palpi porrecti, brevissimi, subtus nigri; antennæ latissime pectinatæ, apice nudæ; alæ nigricante conspersæ, fascia lata obscuriore, fimbria nigricante-cinerea; anticæ valde falcatæ, lituris tribus costalibus nigricantibus; posticæ margine exteriori subangulato subdentato.*

*Male.* Reddish fawn-colour, stout. Proboscis short. Palpi porrect, very short, not extending beyond the head, mostly black beneath; third joint extremely minute. Antennæ very broadly pectinated, bare at the tips; branches fringed. Hind tibiæ not thickened, with four long spurs. Wings blackish-speckled, with a broad irregular deeper-coloured band; fringe blackish, cinereous exteriorly; under side more speckled, with two blackish lines, which correspond to the borders of the band. Fore wings extremely falcate; three blackish marks on the costa; exterior border slightly

convex, rather oblique. Hind wings with the exterior border very slightly scalloped, slightly angular in the middle. Length of the body 6? lines; of the wings 16 lines.

♂. ——— ?

#### CHIZALA DECEPTURA.

**Mas.** *Subylaucescente-murina*; palpi caput paullo superantes; abdomen alas posticas non superans; alæ lineis duabus aut tribus indistinctis obliquis angulosis fimbriaque fuscis; antica valde falcata, margine valde obliquo vix convexo; postica margine exteriore angulato.

**Male.** Mouse-colour, slightly glaucous-tinged, in structure like the preceding species. Palpi extending a little beyond the head. Abdomen not extending beyond the hind wings. Wings with two or three indistinct oblique zigzag brown lines; fringe brown. Fore wings extremely falcate; exterior border very oblique, hardly convex. Hind wings with the exterior border distinctly angular in the middle. Length of the body 6 lines; of the wings 17 lines.

♂. Hindostan. From Archdeacon Clerk's collection.

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#### BROTIS FUSILINEATA.

**Fœm.** *Rufescente-ochracea*; palpi ascendentes, angulati; tibiæ posticæ non incrassatæ; alæ subtus glaucæ; antica subfalcata, strigis transversis fuscis, fasciis quatuor latis pallide purpurascens, fascia 4a marginali valde incompleta, margine exteriore recto; postica pallidiores, nigricante conspersæ, lineis duabus interioribus diffusis fuscis.

**Female.** Reddish ochraceous. Body testaceous beneath. Palpi ascending, not rising higher than the vertex; third joint small, porrect, elongate-conical, forming an angle with the second. Hind tibiæ not thickened. Wings glaucous beneath, except towards the exterior border. Fore wings subfalcate, with transverse brown streaks, and with four broad pale purplish bands; first band basal; second and third approximate, the latter curved on the outer side; fourth marginal, very incomplete; exterior border straight. Hind wings with blackish speckles, paler than the

fore wings, with the exception of the exterior border; two interior somewhat diffuse brown lines. Length of the body 6 lines; of the wings 18 lines.

♂. ———? From Mr. Milne's collection.

### Genus SANGATA.

*Mas et fœm.* Corpus crassum, dense pilosum. Vertex pilis porrectis dense vestitus. Proboscis gracilis. Palpi breves, porrecti, caput non superantes, articulo 3o parvo. Abdomen carinatum, alas posticas paullo superans. Pedes robusti; tibiæ pilosæ, posticæ incrassatæ, calcaribus longissimis. Alæ validæ, integræ, margine exteriori convexo; anticæ vix acutæ, margine exteriori subobliquo. *Mas.*—Antennæ latissime pectinatæ. *Fœm.*—Antennæ subsetulosæ.

*Male and female.* Body very thick, densely pilose. Vertex thickly clothed with porrect hairs. Proboscis slender. Palpi short, porrect, not extending beyond the head; third joint conical, minute. Abdomen keeled, extending a little beyond the hind wings. Legs robust; tibiæ pilose; hind tibiæ somewhat incrassated; spurs very long. Wings stout, entire; exterior border convex; fringe long, full. Fore wings hardly acute; costa straight; exterior border slightly oblique. *Male.*—Antennæ very broadly pectinated; branches pubescent. *Female.*—Antennæ minutely setulose.

### SANGATA ROSEA.

*Mas et fœm.* *Lutea; corpus subochraceum; palpi pedesque antici roseo vittati; alæ antica roseo subconspectæ, atriga discali oblique arcuata lineisque duabus roseis, linea 1a valde flexa, 2a subundulata; postica pallida, roseo suffusæ, simbria alba.*

*Male and female.* Luteous. Body more ochraceous. Palpi and fore legs with rosy stripes. Fore wings with rosy speckles, which are mostly along the costa and along the interior border; a long curved oblique rosy discal streak, and two rosy lines; interior line much bent; exterior line oblique, slightly undulating; fringe tipped with rosy. Hind wings much paler, tinged with rosy; fringe white. *Male.*—Fore wings much more rosy-speckled than

those of the female. Length of the body 6—7 lines; of the wings 14—15 lines.

a. Cape. From M. Dregé's collection.

b, c. ———? From Mr. Milne's collection.

### Genus CANNAGARA.

*Mas.* Corpus robustum. Proboscis valida. Palpi porrecti, subangulati, non crassi, caput superantes; articulus 2us pilosus; 3us cylindricus, 2i dimidio non brevior. Antennæ pectinatæ. Thorax crassus, dense pilosus. Abdomen alas posticas non superans. Pedes validi; femora pilosissima; tibiæ posticæ incrassatæ. Alæ validæ, latæ, integræ; anticæ apice rectangulatæ, margine exteriori subconvexo subobliquo.

*Male.* Body robust. Front not prominent. Proboscis stout. Palpi porrect, not thick, extending some distance beyond the head; second joint pilose; third cylindrical, full half the length of the second, with which it forms a slight angle. Antennæ moderately pectinated. Thorax thick, densely pilose. Abdomen not extending beyond the hind wings. Legs robust; femora very pilose; hind tibiæ somewhat incrassated. Wings stout, broad, entire. Fore wings acutely rectangular at the tips, costa straight; exterior border slightly convex and oblique.

### CANNAGARA AOBISARIA.

*Mas.* *Ferrugineo-fusca; pedes pallide cinerei, nigro conspersi; antici nigro vittati; alæ subnebulosæ, gutta discali nigra cinereo-marginata; anticæ linea exteriori nigricante recta obliqua diffusa nigro punctata, punctis submarginalibus nigris indistinctis, litura costali subapicali arcuata glauco-alba; posticæ cinereo-tinctæ, linea submarginali arcuata diffusa nigricante.*

*Male.* Ferruginous-brown, paler, and with a cinereous tinge on the under side. Legs pale cinereous, black-speckled; fore legs striped with black. Wings somewhat clouded, with a black cinereous-bordered discal dot. Fore wings with a blackish straight oblique diffuse black-pointed exterior line; an indistinct submarginal row of black points, and a curved glaucous-white costal subapical mark. Hind wings cinereous-tinged, with a curved blackish diffuse



submarginal line, which is most distinct on the under side. Length of the body  $6\frac{1}{2}$  lines; of the wings 16—17 lines.

*a, b.* Bogotà. From Mr. Stevens' collection.

### Genus CERNIA.

*Mas.* Corpus glabrum, subcylindricum, vix robustum. Proboscis distincta. Palpi graciles, glabri, porrecti, caput longe superantes; articulus 3us cylindricus, 2o valde brevior. Antennæ simplices, sat robustæ. Abdominis fasciculus apicalis minimus. Pedes glabri, breviusculi, sat robusti; tibiæ posticæ incrassatæ. Alæ amplæ, margine exterioro dentato subflexo, fimbria brevi; anticæ vix falcatæ, margine exterioro postico perobliquo; posticæ abdomen paullo superantes, costa apicem versus truncata.

*Male.* Body hardly stout, smooth, nearly cylindrical. Front fat. Proboscis distinct. Palpi slender, smooth, porrect, extending rather far beyond the head; third joint cylindrical, much shorter than the second. Antennæ rather stout, quite smooth. Abdomen with a very small apical tuft. Legs smooth, rather short and stout; hind tibiæ incrassated; spurs moderately long. Wings ample; exterior border dentate, slightly bent; fringe short. Fore wings hardly falcate; costa straight; exterior border very oblique hindward. Hind wings extending a little beyond the abdomen; costa truncated toward the tip.

### CERNIA AMYCLARIA.

*Mas.* Pallide ochraceo-carnina; caput pedesque rufo-conspersa; thorax antice albidus; alæ linea exterioro fusca tenui indistincta dentata obliqua apud costam nigra, fimbria rufa; anticæ litura discali valde indistincta, punctis costalibus nigris; posticæ playa costali subapicali cinerea.

*Male.* Pale ochraceous flesh-colour. Head and legs red-speckled. Thorax whitish in front. Wings with a slight indistinct dentate oblique exterior brown line, which is black and distinct on the costa of the fore wings; fringe red. Fore wings with a very slight and indistinct discal mark; costa with black points. Hind wings with a cinereous patch near the end of the costa. Length of the body 5 lines; of the wings 14 lines.

*a.* Moreton Bay. From Mr. Diggles' collection.

## Genus LAUDOSIA.

*Fœm.* Corpus crassum. Proboscis robusta. Palpi robusti, fere erecti, caput superantes; articulus 2us fusiformis; 3us cylindricus, 2i dimidio vix brevior. Antennæ simplices. Thorax et pectus dense lanuginosa. Pedes robusti, glabri; tibiæ posticæ non incrassatæ. Alæ longæ, amplæ, densæ, integræ, margine exteriori per obliquo; anticæ apud apices productæ, peracutæ, costa perparum convexa, margine exteriori recto vix angulato.

*Female.* Body thick. Front not prominent. Proboscis robust. Palpi stout, nearly vertical, ascending higher than the head; second joint fusiform; third cylindrical, nearly half the length of the second. Antennæ simple. Thorax and pectus densely lanuginose. Abdomen not extending so far as the hind wings. Legs robust, smooth; hind tibiæ not incrassated; spurs short. Wings long, ample, stout, entire; exterior border very oblique. Fore wings with the tips prolonged and very acute; costa very slightly convex; exterior border straight, with the exception of an extremely slight angle in the middle. Hind wings with the exterior border slightly convex; interior angle prominent.

## LAUDOSIA BUDDLORARIA.

*Fœm.* Albido-testacea; alæ nigro subconspersæ, linea exteriori undulata e punctis nigris, punctis marginalibus minimis; antica linea exteriori nigro unimaculata, linea interiori e punctis duabus aut tribus nigris, plaga subtus ochracea subapicali.

*Geometra Buddloraria, Morritz, MSS.*

*Female.* Whitish testaceous, more whitish beneath. Abdomen minutely black-speckled. Wings very thinly and minutely black-speckled, with an exterior undulating line of black points; a row of very minute marginal points on the veins, these points most distinct on the under side. Fore wings with a black discal spot on the exterior line; an interior line indicated by two or three black points; under side with an ochraceous subapical patch. Length of the body  $7\frac{1}{2}$  lines; of the wings 23 lines.

Venezuela. In Mr. Saunders' collection.

## Genus BASSANIA.

*Fœm.* Corpus crassum, pilosum. Frons subfasciculata. Proboscis robusta. Palpi validi, breves, oblique ascendentes, articulo 3o parvo. Antennæ simplices. Abdomen alas posticas non superans. Pedes validi, non pilosi; tibiæ posticæ vix incrassatæ. Alæ amplæ, validæ, integræ; anticæ subfalcatæ, margine exteriori subconvexo subobliquo; posticæ margine exteriori vix dentato.

*Female.* Body thick, pilose. Front slightly tufted. Proboscis robust. Palpi stout, short, obliquely ascending; third joint conical, less than one-fourth of the length of the second. Antennæ simple. Abdomen not extending beyond the hind wings. Legs stout, not pilose; hind tibiæ hardly incrassated. Wings ample, stout, entire; fringe full. Fore wings subfalcate; costa straight; exterior border slightly convex and oblique. Hind wings with the exterior border hardly scalloped between the veins.

## BASSANIA AMETHYSTATA.

*Fœm.* *Rufescente-ochracea, subtus pallide testacea; alæ puncto discali nigro; anticæ linea exteriori recta obliqua rufa, spatio interiore purpurascens, costa albido conspersa, striga costali subapicali angulata nigra; posticæ testaceæ, apud marginem exteriorem rufescentes.*

*Geometra amethystata, Morritz, MSS.*

*Female.* Reddish ochraceous, mostly pale testaceous on the under side. Abdomen testaceous. Antennæ and legs whitish, black-speckled. Wings with a black discal point. Fore wings with a purplish tinge on the inner side of the straight oblique red exterior line, which is not apparent on the under side: costa with whitish speckles; a slight angular costal subapical black streak. Hind wings testaceous, slightly black-speckled, reddish towards the exterior border; fringe also reddish. Length of the body 8 lines; of the wings 20 lines.

Venezuela. In Mr. Saunders' collection.

## Genus CORYPHA.

*Fœm.* Corpus sat robustum. Proboscis brevis, tenuis. Palpi porrecti, subangulati, caput sat superantes; articulus 3us lanceolatus. Antennæ glabræ. Abdomen alas posticas non superans. Pedes glabri. Alæ amplæ, margine exteriori convexo antice bis inciso; posticæ acutæ, vix falcatæ, costa convexa.

*Female.* Body moderately stout. Frontal tuft hardly prominent. Palpi porrect, extending rather far beyond the head; third joint lanceolate, about half the length of the second, with which it forms a slight angle. Proboscis short, slender. Antennæ and legs smooth. Abdomen not extending beyond the hind wings. Wings ample; exterior border convex, with two slight excavations in front. Fore wings acute, hardly falcate; costa convex; exterior border moderately oblique.

## CORYPHA INCONGRUARIA.

*Fœm.* *Flavescente-testacea, ferrugineo conspersa; palpi porrecti, subangulati, articulo 3o lanceolato longiusculo; alæ amplæ, lineis tribus ochraceis obliquis subrectis subparallelis, linea submarginali pallide fuscescente undulata valde diffusa et indistincta, margine exteriori dentato; anticæ subfalcata, linea 1a antice rectangulata, spatio submarginali cervino.*

*Female.* Yellowish testaceous, with ferruginous speckles, which are most prevalent on the under side. Palpi porrect, as long as the breadth of the head, very slightly angular; third joint lanceolate, more than half the length of the second. Abdomen extending as far as the hind wings. Wings ample, with three ochraceous oblique nearly straight and parallel lines; third line rather darker than the others; a pale brownish undulating very diffuse and indistinct submarginal line; exterior border scalloped between the veins. Fore wings subfalcate; first line nearly rectangular in front; space between the third line and the exterior border slightly fawn-coloured. Length of the body 8 lines; of the wings 20 lines.

*a.* North China. From Mr. Fortune's collection.

## Genus AUAXA.

*Fam.* Corpus sat validum. Frons plana. Proboscis brevis. Palpi breves, graciles, porrecti, caput non superantes; articulus 3us minimus. Antennæ validæ, glabræ, subcompressæ. Pedes glabri. Alæ amplæ, margine exteriori subdentato; anticæ subfalcatæ, costa convexa, margine exteriori vix convexo; posticæ abdomen longe superantes, margine exteriori vix flexo.

*Female.* Body moderately stout. Front flat. Proboscis short. Palpi short, slender, porrect, not extending beyond the head; third joint extremely minute. Antennæ stout, smooth, somewhat compressed. Legs smooth. Wings very ample; exterior border very slightly scolloped or dentate. Fore wings subfalcate; costa convex; exterior border hardly convex, moderately oblique. Hind wings extending far beyond the abdomen; exterior border indistinctly bent; interior angle prominent.

## AUAXA CESADARIA.

*Fœm.* *Flava; palpi ochracei; alæ linea recta obliqua ochracea, fimbria ochracea, fusco notata; anticæ spatio marginali subochraceo.*

*Female.* Yellow. Palpi ochraceous. Wings with a straight ochraceous line, which extends from near the tip of the costa of the fore wings to the middle of the interior border of the hind wings; fringe ochraceous, with brown marks on the denticulations. Fore wings tinged with ochraceous between the line and the exterior border. Length of the body 8 lines; of the wings 22 lines.

China. In Mr. Saunders' collection.

## Genus DANALA.

*Fam.* Corpus sat robustum. Frons plana. Proboscis brevis. Antennæ pubescentes. Palpi graciles, oblique ascendentes, caput non superantes; articulus 3us conicus, minimus. Antennæ pubescentes. Pedes glabri, breviusculi; femora carinata; tibiæ intermediæ subarcuatæ; tibiæ posticæ incrassatæ. Alæ amplæ, spissæ, margine exteriori angulato, vix dentato; posticæ marginis exterioris angulo anguloque interiore quadratis.

*Female.* Body moderately stout. Front flat. Proboscis short. Palpi slender, obliquely ascending, not rising so high as the

vertex; third joint extremely minute, conical, not more than one-sixth of the length of the second. Antennæ pubescent. Legs smooth, rather short; femora furrowed; middle tibiæ slightly curved; hind tibiæ incrassated; spurs moderately long. Wings ample, stout; exterior border angular, hardly scolloped or dentate. Fore wings subfalcate; costa straight; hind part of the exterior border very oblique. Hind wings with the interior angle quadrate; exterior border nearly rectangular.

### DANALA LACTARIA.

*Fœm.* *Pallide cervina; caput et thorax anticus ferruginea; abdomen apicem versus purpurascente-cinereum; alæ nigro conspersæ, lineola submarginali postica lineaque marginali interrupta ferrugineis, fimbria albido-cinerea, linea subtus obliqua exteriori e guttis nigris; anticæ apud angulum interiorem purpurascente-cinereæ; posticæ purpurascente-cinereæ.* *Var. β.*—*Alæ anticæ testaceo biplagiatae; posticæ uniplagiatae.*

*Female.* Pale dull fawn-colour. Head and fore border of the thorax ferruginous. Abdomen purplish cinereous towards the tip. Wings black-speckled; fore wings about the interior angle and nearly the whole of the hind wings tinged with purplish cinereous; submarginal line ferruginous obsolete, except towards the interior angle; marginal line ferruginous, interrupted; fringe whitish cinereous; under side with an oblique exterior line of black dots, which are hardly apparent above. *Var. β.*—A testaceous patch near the exterior part of the costa of each wing, and a smaller testaceous patch near the interior costa of the fore wings. Length of the body 5 lines; of the wings 14 lines.

Sarawak, Borneo. In Mr Saunders' collection.

### Genus AZATA.

*Fœm.* Corpus sat gracile. Fasciculus frontalis non porrectus. Proboscis brevis. Palpi breves, compressi, caput perpaullo superantes; articulus 3us minimus. Antennæ graciles, subserratae. Pedes glabri, sat graciles; tibiæ posticæ non incrassatae. Alæ amplæ, margine exteriori angulato; anticæ subfalcatae, costa recta, margine exteriori antico excavato; posticæ abdomen longe superantes, marginis exterioris angulo anguloque interiore quadratis.

*Female.* Body rather slender. Frontal tuft not prominent. Proboscis short. Palpi short, compressed, extending very little be-

yond the head; third joint extremely minute. Antennæ slender, very minutely serrated. Legs smooth, rather slender; hind tibiæ not incrassated. Wings ample; exterior border angular. Fore wings subfalcate; costa straight; exterior border excavated in front, very oblique hindward. Hind wings extending far beyond the abdomen, with the interior angle and the angle of the exterior border quadrate, the latter much more prominent than that of the fore wings.

### AZATA IDRIASARIA.

*Fœm.* *Pallide lignicolor, subtus lutea; alæ ferrugineo conspersæ, lineis duabus obliquis ferrugineis, 1a basali angulata, 2a interiore subarcuata, linea exterior cinerea valde diffusa subtus nigricante bene determinata, linea marginali ferruginea; antice plaga discali exterior nigra, striga apicali interrupta alba.*

*Female.* Pale wood-colour, luteous beneath. Wings transversely ferruginous-speckled; two ferruginous oblique lines; first near the base, forming an angle in front; second interior, very slightly curved; an exterior cinereous very diffuse line, which is blackish and very distinct on the under side; marginal line ferruginous. Fore wings with a black patch on the middle of the exterior line, and with an oblique white apical much interrupted streak, which is more complete on the under side. Length of the body 4 lines; of the wings 13 lines.

a. ——— ?

### Genus EVARZIA.

*Mas.* Corpus sat robustum. Fasciculus frontalis vix productus. Proboscis valida. Palpi porrecti, pilosi, caput superantes; articulus 3us longi-conicus. Antennæ pubescentes. Abdominis fasciculus apicalis parvus. Pedes glabri; tibiæ posticæ valde incrassatæ. Alæ amplæ; anticæ vix falcatæ, margine exterior perobliquo antice subexcavato; posticæ subobtusæ, margine exterior antice inciso postice quadrato.

*Male.* Body moderately stout. Frontal tuft slightly prominent. Proboscis stout. Palpi porrect, pilose, extending beyond the head; third joint elongate-conical, not more than one-fourth of the length of the second. Antennæ pubescent. Abdomen with a small apical tuft. Legs smooth; hind tibiæ much incrassated; spurs moderately long. Wings ample. Fore wings hardly falcate;

costa very slightly convex towards the tip ; exterior border very oblique, its fore part very slightly excavated. Hind wings extending very little beyond the abdomen, obliquely truncated at the tips, notched along the fore part of the exterior border, quadrate hindward.

#### EVARZIA OZARARIA.

**Mas.** *Pallide lignicolor, fusco aut nigricante conspersa ; abdomen e guttis nigris bilineatum ; alæ lineis duabus interioribus indistinctis undulatis dentatis, linea exteriori recta obliqua duplicata obscure fusca valde conspicua, puncto discali lineaque marginali nigricantibus, fimbria fuscescente interlineata, fascia subtus lata submarginali ferruginea ; antica linea apud costam angulata.*

**Male.** Pale wood-colour, brown or blackish speckled, whitish beneath. Abdomen with two rows of blackish dots. Wings with two slight interior undulating and dentate lines, one near the base, the other interior ; a straight oblique double very distinct dark brown line, which is very near the exterior border of the fore wings and forms an angle near the costa ; discal point and marginal line blackish, the latter somewhat lunulate ; fringe slightly interlined with pale brown ; under side with a broad ferruginous band along the outer side of the slightly dentate exterior brown line. Length of the body 6 lines ; of the wings 16 lines.

**a.** Sarawak, Borneo. From Mr. Wallace's collection.

#### EVARZIA AVITUSARIA.

**Mas.** *Pallide lignicolor ; abdomen nigricante quadriguttatum ; alæ fusco aut nigricante conspersæ, lineis duabus obscure fuscis, 1a angulosa interrupta, 2a recta duplicata optime determinata, gutta discali nigricante, lituris submarginalibus fuscis, spatio marginali subtus ferrugineo plagis quatuor albidis.*

**Male.** Pale wood-colour, whitish beneath. Abdomen with four blackish dots near the base ; the hind pair much smaller than the other pair. Wings minutely brown or blackish-speckled, with two dark brown lines ; interior line zigzag, interrupted ; exterior line straight, double, very distinct, extending from three-fourths of the length of the costa of the fore wings to near the tip of the interior border of the hind wings ; a blackish discal dot ; marginal space irregularly marked with brown ; under side with the marginal



space ferruginous, except four whitish patches, which are apical in the fore wings, and on the hind part of the exterior border in the hind wings. Length of the body 6 lines; of the wings 14 lines.

Sarawak, Borneo. In Mr. Saunders' collection.

### Genus BERAMBE.

*Mas.* Corpus sat gracile. Frons plana. Proboscis gracilis. Palpi breves, graciles, ascendentes; articulus 3us cylindricus, 2o brevior. Antennæ pectinatæ, apice simplices. Abdomen cylindricum, longiusculum, alas posticas superans. Pedes graciles, glabri; tibiæ posticæ valde incrassatæ. Alæ breviusculæ, latiusculæ; anticiæ apice rectangulatæ, margine exteriori subobliquo; posticæ subtruncatæ, margine exteriori rotundato.

*Male.* Body rather slender. Front flat. Proboscis slender. Palpi short, slender, ascending, not rising to a level with the vertex; third joint cylindrical, shorter than the second. Antennæ moderately pectinated, simple at the tips. Abdomen cylindrical, rather long, extending beyond the hind wings. Legs slender, smooth; hind tibiæ very much incrassated; middle spurs long; hind spurs short. Wings rather short and broad. Fore wings rectangular at the tips; costa and exterior border very slightly convex, the latter slightly oblique. Hind wings slightly truncated at the tips; exterior border very convex; interior angle rather prominent.

### BERAMBE GALLABIA.

*Mas.* Testacea, fusco aut nigro conspersa, subtus pallide lutea; vertex ferrugineus; tarsi antici nigri; alæ linea submarginali et punctis nigris; anticiæ fasciis duabus vagis obscure purpurascens apud costam connexis, 1a postice obsoleta, 2a strigam emittente; posticæ apud marginem anteriorem cervinæ, linea interiore guttis duabus apiceque subtus rufescentibus.

*Male.* Testaceous, brown or black-speckled, pale luteous beneath. Vertex ferruginous. Anterior tarsi, except at the base and tips of anterior tibiæ, black. Wings with a submarginal line of black points; these are larger and much more numerous in the fore wings than in the hind wings. Fore wings with two irregular dull purplish bands, which are connected along the costa; first band obsolete hindward; second emitting a streak to the exterior border;

fringe purplish, excepting the middle part, which is slightly gilded. Hind wings fawn-coloured along the exterior border; under side with an interior line; two exterior dots and the fore part of the exterior border reddish; a black dot on the interior border, which is fringed. Length of the body 4 lines; of the wings 9 lines.

Rio Janeiro. In Mr. Fry's collection.

### Genus BULONGA.

*Fœm.* Corpus gracile. Proboscis brevissima. Palpi breves porrecti, angulati; articulus 3us 2o brevior. Antennæ simplices. Pedes graciles, glabri; tibiæ anticæ brevissimæ. Alæ latiusculæ anticæ apice rectangulatæ, costa vix convexa, margine exteriori obliquo; posticæ abdomen superantes, angulo interiore acuto bene determinato.

Bulonga, *Walk. Journ. Proc. Linn. Soc.* iii. 193.

*Female.* Body slender. Proboscis very short. Palpi oblique ascending; third joint porrect, rather shorter than the second, with which it forms an obtuse angle. Antennæ simple, filiform. Legs slender, smooth; spurs rather short; fore tibiæ very short. Wings rather broad; fore wings rectangular at the tips; costa hardly convex; exterior border rather oblique. Hind wings with an acute and prominent interior angle.

### BULONGA SCHISTACEARIA.

*Fœm.* Glauco-cinerea; alæ nitentes, linea marginali nigra, finibus interlineata; anticæ fusco quadrilineatæ; posticæ fusco trilineatæ.

Bulonga schistacearia, *Walk. Journ. Proc. Linn. Soc.* iii. 193.  
Singapore.





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LIST

OF THE  
SPECIMENS  
OF  
LEPIDOPTEROUS INSECTS  
IN  
THE COLLECTION  
OF THE  
BRITISH MUSEUM. *Nat. hist*  
*Dept. of zoology.*  
BY  
FRANCIS WALKER, F.L.S., &c.

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PART XXI.—GEOMETRITES.

(CONTINUED).

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PRINTED BY ORDER OF THE TRUSTEES.  
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## P R E F A C E .

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THE object of the present Catalogue is to give a complete list of all the genera and species of Geometrites known to exist in the different collections. The letters *a, b, c*, &c., after the species, denote the specimens now contained in the British Museum, followed by the *habitat* and the mode in which each of them was obtained, and the absence of these *letters* indicates the species which are desiderata, and therefore desirable to be procured for the collection.

JOHN EDWARD GRAY.

British Museum,

November 1, 1860.





CATALOGUE  
OF  
LEPIDOPTERA HETEROCERA.

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FIFTH SERIES.

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Tribe 10. GEOMETRITES.

Fam. 3. CENOCHROMIDÆ.

**Corpus crassum. Frons pilosa, non fasciculata. Proboscis robusta. Palpi validi, recti; articulus 2us glaber; 3us squamosus, ovalis, bene determinatus. Antennæ validæ, maris pectinatæ, apice acutæ et filiformes. Thorax subquadratus, lanuginosus. Abdomen crassum, læve, subdepressum. Pedes robusti, breves; tibiæ femoribus vix longiores; posticæ non incrassatæ, calcaribus approximatis brevissimis. Alæ densæ, velutinæ, non angulatæ, sæpissime unilineatæ aut bilineatæ, fimbria brevi; anticæ acutæ.**

**Cenochromidæ, Guen. *Phal.* i. 183.**

**Size large or very large. Body thick. Front villose, not tufted. Proboscis robust. Palpi stout, straight; second joint with smooth hairs; third squamous, ovate, very distinct. Antennæ stout, pectinated in the male, filiform and acute at the tips. Thorax subquadrate, woolly. Abdomen thick, smooth, slightly depressed. Legs robust, short; tibiæ hardly longer than the femora; hind tibiæ not incrassated, with approximate and very short spurs. Wings stout, velvety, not angular, generally with one or two lines; fringe short. Fore wings acute.**

**A. Tibiæ posticæ quadricalcaratæ.****A. Calcaria approximata.**

A. Alæ dentatæ. - - - 1. *MONOCTENIA*, *Guen*

B. Alæ integræ.

a. Corpus crassum.

i. Tarsi spinosi. - - - 4. *PHALLARIA*, *Guen*

ii. Tarsi non spinosi. - - 5. *GASTROPHORA*, *Guen*

b. Corpus vix robustum. - 6. *SARCINODES*, *Guen*

**B. Calcaria non approximata.****A. Calcaria æqualia.**

i. Calcaria brevissima. - - 2. *ÆNOCHROMIA*, *Guen*

ii. Calcaria brevia.

\* Tibiæ posticæ non incrassatæ. 11. *BALLIACE*, *Walk*

\*\* Tibiæ posticæ incrassatæ. - 12. *CHOARA*, *Walk*

iii. Calcaria longa.

\* Abdomen non attenuatum. 7. *HYPOGRAPHIA*, *Guen*

\*\* Abdomen attenuatum. - - 15. *NISISTA*, *Walk*

B. Calcaria inæqualia. - - - 13. *FISERA*, *Walk*

**B. Tibiæ posticæ bicalcaratæ.****A. Pedes robusti.**

A. Alæ anticæ non falcatæ. - - - 3. *ARRHODIA*, *Guen*

B. Alæ anticæ falcatæ.

a. Calcaria parva. - - - 9. *COLUSSA*, *Walk*

b. Calcaria longiuscula. - - 14. *MERGANA*, *Walk*

**B. Pedes graciles.**

A. Palpi articulo 3o conico. - - 8. *NIGASA*, *Walk*

B. Palpi articulo 3o cylindrico. - 10. *DIAMUNA*, *Walk*

**Genus 1. MONOCTENIA.**

Corpus incrassatum. Frons arcuata, bicolor. Palpi crassi breves, ascendentes, articulus 3us conicus. Antennæ longæ. Thorax planus, villosissimus. Pedes robusti; femora limbriata; tibiæ posticæ calcaribus quatuor approximatis. Alæ validæ, dentatæ anticæ lineis dentatis confluentibus. *Mas.*—Antennæ late unipectinatæ, apice filiformes. Abdomen depressum. *Fœm.*—Antennæ dentatæ. Abdomen apice acutum.

*Monoctenia*, *Guen. Phal. i. 183.*

Body very thick. Front arched, of two colours. Palpi thick short, ascending, not rising to the vertex; third joint conical. Antennæ long. Thorax flat, very villose. Legs stout; femora fringed; hind tibiæ with two pairs of approximate spurs. Wing

stout, dentate. Fore wings with dentate and confluent lines. *Male*.—Antennæ broadly pectinated on one side, filiform at the tips. Abdomen depressed. *Female*.—Antennæ dentate. Abdomen acute at the tip.

### 1. MONOCTENIA SALERNARIA.

*Mas et fœm. Roseo-ochracea; vertex et antennæ testacea; alæ linea dentata obliqua nigricante; anticæ lineis duabus dentatis postice convexis, spatio intermedio obscuro.*

*Monoctenia Salernaria, Guen. Phal. i. 184, 286, pl. 7, f. 3.*

*a. Australia. From Mr. Stevens' collection.*

*b, c. Tasmania. Presented by Morton Allport, Esq.*

*d. Australia. From Mr. Damel's collection.*

*e. ——— ?*

### 2. MONOCTENIA OBTUSATA.

*Fœm. Pallide cinerea; caput rufescens, testaceo varium; abdomen punctis lateralibus anterioribus nigricantibus; alæ fusco conspersæ, fascia subtus exteriori lata interrupta pallide ferruginea; anticæ acutæ, punctis paucis nigris, margine exteriori antico subtruncato, plaga subtus magna discali nigricante.*

*Female. Pale cinereous. Head and legs reddish, varied with testaceous. Abdomen minutely black-speckled; anterior segments with a blackish point on each side. Wings irregularly brown-speckled; the speckles here and there confluent; under side with an exterior broad irregular interrupted pale ferruginous band. Fore wings acute, with a few black points; costa very slightly convex along the exterior part, and equally concave exteriorly; exterior border truncated along one-third of the length, very oblique from thence to the interior angle; under side with a large blackish discal patch. Length of the body 9 lines; of the wings 24 lines.*

*a. Moreton Bay. From Mr. Diggles' collection.*

### 3. MONOCTENIA HIMEROIDES.

*Fœm. Testaceo-cinerea; thorax antice, rufescens; pedes fasciati; antennæ subserratæ; alæ elongatæ, nigro subconsersæ, margine exteriori vix dentato; anticæ acutæ, costa subconvexa apicem versus subconcava, margine exteriori flexo, plaga subtus magna discali nigra; posticæ margine exteriori postico subtruncato.*

*Female.* Testaceous-cinereous, moderately stout. Face, except the fore border, fore border of the thorax and legs, reddish, the latter with testaceous-cinereous bands. Antennæ minutely serrated. Wings elongate, not broad, minutely and irregularly black-speckled; exterior border very slightly dentated. Fore wings acute; costa very slightly convex along the interior part, and equally concave exteriorly; exterior border bent at one-third of the length, concave between the bend and the tip of the wing, extremely oblique hindward; under side with a large black discal patch. Hind wings somewhat truncated along the hind part of the exterior border. Length of the body 8 lines; of the wings 26 lines.

a. Tasmania. Presented by R. Butler, Esq.

#### 4. MONECTENIA EXCUSATA.

*Mas.* *Testaceo-cinerea, sat gracilis, subtus lutescens; caput antice ferrugineum, testaceo fasciatum; palpi pedesque rufescente fasciati; alæ fusco conspersæ, purpurascente subinctæ, lineis duabus undulatis maculisque fuscis; antica subfalcata, margine exteriori vix flexo antice subexcavato, linea interiore fusca arcuata interrupta; postica plaga elongata purpurascente-fusca, margine exteriori medio subexcavato.*

*Male.* Testaceous-cinereous, comparatively slender, mostly luteous tinged on the under side. Head in front ferruginous, with a testaceous band. Palpi and legs with reddish bands. Wings ample, brown-speckled, with a slight pale purplish bloom, and with two undulating brown lines, which are diffuse and indistinct in the fore wings; these lines are accompanied by irregularly placed brown spots. Fore wings subfalcate; costa straight, exterior border hardly bent, slightly excavated in front, straight hindward; an interior curved interrupted brown line. Hind wings with an elongated purplish brown patch near the outer side of the second line; exterior border slightly excavated in the middle; interior angle rounded. Length of the body 7 lines; of the wings 18 lines.

This species differs much from the typical form of *Monoctenia*.

a. Moreton Bay. From Mr. Diggles' collection.

#### Genus 2. ŒNOCHROMIA.

*Corpus incrassatum. Frons unicolor, fasciculo conico. Palpi robusti, ascendentes, subangulati; articulus 3us longus, cylindricus. Antennæ validæ. Thorax latus, villosus. Abdomen crassum, sub-*

depressum, apice quadratum. Pedes sat graciles; tibiæ posticæ calcaribus quatuor brevissimis; tarsi spinosi. Alæ densæ, velutinæ, integræ, linea una dentata, fimbria brevissima; anticæ elongatæ, falcatæ, acutissimæ; posticæ breves. *Mas.*—Antennæ pectinatæ, apice nudæ.

*Enochromia*, *Guen. Phal.* i. 184.

Body very thick. Front of one colour; its hairs forming a conical protuberance between the palpi. Palpi robust, ascending, slightly angular; third joint cylindrical, conical at the tip, much shorter than the second. Antennæ stout. Thorax broad, villose. Abdomen thick, slightly depressed, quadrate at the tip in both sexes. Legs rather slender; hind tibiæ with two pairs of spurs, which are very short and somewhat widely apart; tarsi spinose. Wings thick, velvety, entire, with one dentate line; fringe very short. Fore wings elongate, falcate and very acute at the tips. Hind wings short; interior angle prominent. *Male.*—Antennæ pectinated, bare towards the tips. *Female.*—Antennæ smooth.

#### 1. *ENOCHROMIA VINARIA*.

*Roseo-purpurea; antennæ ochraceæ; alæ nigro subconspersæ, linea obliqua flava rufo marginata, fimbria ferruginea; anticæ linea interiore indeterminata, macula discali nigra albo signata, litura apicali cinerea, plaga subtus postica saturate rufa; posticæ plaga subtus antica alba ferrugineo signata.*

*Enochromia vinaria*, *Guen. Phal.* i. 185, 287, pl. 7, f. 2.

a, b. Sydney. Presented by E. Doubleday, Esq.

#### Genus 3. *ARHODIA*.

Corpus robustum. Palpi porrecti, brevissimi; articulus 3us minimus. Abdomen alas posticas non superans. Pedes robusti; tibiæ posticæ bicalcaratæ; tarsi postici setosi, non spinosi. Alæ amplæ, spissæ, integræ, anticæ trigonæ, acutæ, non falcatæ, costa subconvexa. *Mas.*—Antennæ latissime pectinatæ. *Fæm.*—Antennæ dentatæ. Abdomen apice obtusum, oviductu exserto.

*Arhodia*, *Guen. Phal.* i. 185.

Body robust. Front villose, flat, of one colour. Palpi porrect, very short, not extending beyond the head; third joint very minute. Abdomen not extending beyond the hind wings. Legs stout; hind

tibiæ with two spurs; hind tarsi bristly, not spinose. Wings ample, thick, entire. Fore wings triangular, acute, not falcate; costa slightly convex. *Male*.—Antennæ very broadly pectinated. *Female*.—Antennæ with dentiform and very short laminæ on one side. Abdomen obtuse at the tip; oviduct prominent.

#### 1. ARHODIA LASIOCAMPARIA.

*Pallidissime cervina, roseo vix suffusa; alæ anticæ linea exteriorè obliqua e punctis purpureis, plaga subtus discali maxima atro purpurea; posticæ gutta discali lineaque exteriorè purpureis.*

*Arhodia lasiocamparia*, Guen. *Phal.* i. 186, 288.

*a.* Tasmania. From Mr. A. J. Smith's collection.

#### 2. ARHODIA RETRACTARIA.

*Fœm. Roseo-cervina; antennæ serratæ; alæ sat angustæ, lineis duabus nigricantibus obliquis indistinctis subdenticulatis subundulatis, angulo interiorè rotundato; anticæ elongatæ, nigro subconspersæ, apice rotundatæ, costa subconvexa, plaga subtus discali magna nigricante-purpurea; posticæ roseæ, fimbria alba.*

*Female.* Rosy fawn-colour. Antennæ serrated. Wings rather narrow, with two oblique indistinct blackish slightly denticulated and undulating lines; interior angle much rounded. Fore wings elongate, rounded at the tips, minutely speckled with black; costa slightly convex; exterior border extremely oblique, not convex; under side with a large discal blackish purple patch. Hind wings rosy; fringe white. Length of the body 7—9 lines; of the wings 20—26 lines.

This species is very nearly allied to *A. lasiocamparia*, but may be distinguished by the difference of colour, by the lines of the wings, and by the more convex costa of the fore wings.

*a, b.* Moreton Bay. From Mr. Diggles' collection.

#### Genus 4. PHALLARIA.

*Corpus incrassatum. Vertex discolor. Frons villosa. Palpi robusti, rostriformes, oblique ascendentes; articulus 3us longus, cylindricus. Thorax villosus, subquadratus. Abdomen depressum, apice acutum. Pedes validi, nigro conspersi; tibiæ posticæ calcaribus quatuor approximatis; tarsi spinosi. Alæ spissæ, glabræ,*

ample, unilineatæ; anticæ acutæ, valde falcatæ; posticæ angulo interiore producto.

*Phallaria*, *Guen. Phal.* i. 186.

Body very thick. Vertex discoloured. Front villose. Palpi robust, obliquely ascending, rostriform; third joint cylindrical, half the length of the second. Thorax subquadrate, villose. Abdomen ample, depressed, acute at the tip in both sexes. Legs stout, black-sprinkled; hind tibiæ with two very approximate pairs of spurs; tarsi spinose. Wings thick, smooth, very ample, with one line. Fore wings acute, very falcate; exterior border convex. Hind wings with the interior angle prominent.

*Male.* Antennæ moderately pectinated on both sides.

*Female.* Antennæ simple.

### 1. PHALLARIA OPHIUSARIA.

*Murina* (mas) aut *cervina* (fœm.); vertex niveus; alæ linea recta obliqua ferruginea intus pallidiore extus obscuriore; anticæ litura discali transversa fusca albo signata.

*Phallaria Ophiusaria*, *Guen. Phal.* i. 186, 289.

a. Australia. From Mr. Argent's collection.

b, c. Australia. From Mr. Stevens' collection.

d—f. New South Wales. From Mr. Wood's collection.

g. Australia. From Mr. Damel's collection.

### 2. PHALLARIA SUBUSTARIA.

Fœm. Cinerea; palpi oblique ascendentes, verticem non superantes, articulo 3o longo lanceolato; pedes graciles, nigro conspersi, alæ fusco subconspersæ, linea subrecta e punctis nigris, fimbria brevi nigricante; anticæ falcatæ, costa subtus nigro punctata.

*Female.* Cinereous, paler beneath. Palpi obliquely ascending, not rising higher than the vertex; third joint lanceolate, about half the length of the second. Legs slender, speckled with black. Wings minutely and indistinctly speckled with brown; a nearly straight line of black points, extending from the tips of the fore wings to two-thirds of the length of the interior border of the hind wings; under side tinged with brown towards the exterior border; fringe short, mostly blackish. Fore wings falcate; costa with black points beneath. Length of the body 7 lines; of the wings 14 lines.

a. Moreton Bay. From Mr. Diggles' collection.

## 3. PHALLARIA? OCHRIPENNATA. .

*Fœm.* Ochracea; palpi subangulati, articulo 3o longo; abdomen roseo-ochraceum; alæ linea saturatiore obliqua subrecta, subtus apud marginem exteriorem roseæ; anticæ acutissime falcatae; posticæ linea rosea.

*Female.* Ochraceous, paler beneath. Third joint of the palpi cylindrical, much more than half the length of the second, with which it forms a slight angle. Abdomen rosy ochraceous. Wings with a deeper ochraceous nearly straight oblique line, which extends from the tips of the fore wings to a little beyond half the length of the interior border of the hind wings; this line is rosy on the hind wings and beneath, where the wings are tinged with rosy towards the exterior border. Fore wings very acutely falcate. Length of the body 9 lines; of the wings 22 lines.

*a.* Australia. Presented by Sir G. Grey.

## Genus 5. GASTROPHORA.

Corpus valde incrassatum. Caput parvum, retractum. Vertex discolor. Frons plana. Palpi compressi, brevissimi, subascendentes; articulus 3us minimus. Pedes breves, crassi, striatæ; tibiæ posticæ calcaribus quatuor parvis approximatis; tarsi moniliformes, non spinosi. Alæ amplæ, integræ; anticæ acutæ, falcatae, non lineatæ, costa convexa. *Mas.*—Antennæ latissime pectinatæ. *Fœm.*—Antennæ simplices. Abdomen maximum, alas posticas superans.

*Gastrophora*, Guen. *Phal.* i. 187.

Body very thick. Head small, retracted. Vertex discoloured. Front flat. Palpi compressed, very short, slightly ascending, not extending beyond the head; third joint very minute. Legs short, thick, striated; hind tibiæ as long as the femora; spurs short, approximate; tarsi moniliform, without spines; claws very robust. Wings ample, entire. Fore wings acute, falcate, without lines; costa convex. *Male.*—Antennæ very broadly pectinated. *Female.*—Antennæ simple. Abdomen very large, extending beyond the hind wings.

## 1. GASTROPHORA HENRICARIA.

*Cervino-albida; alæ anticæ nigro conspersæ, subtus ex parte luteæ plaga maxima atra purpureo signatæ; posticæ luteæ, margine albido, basi fascia guttisque exterioribus atris. Mas.*—Alæ anticæ linea recta subobliqua nigra.



*Gastrophora Henricaria*, *Guen. Phal.* i. 187, 290, pl. 21, f. 4.

a, b. Moreton Bay. From Mr. Diggles' collection.

c. Australia. From Mr. Damel's collection.

d, e. Australia. From Mr. Strange's collection.

### Genus 6. SARCINODES.

Corpus vix robustum. Vertex planus, declivis, trigonus. Frons carinata. Palpi glabri, caput paullo superantes; articulus 2us latus. Antennæ maris cylindricæ, filiformes. Abdomen fœminæ longum, depressum. Pedes graciles, glabri; tibiæ posticæ calcaribus quatuor longiusculis approximatis. Alæ patulæ, integræ; anticæ acutissimæ, valde falcatæ.

*Sarcinodes*, *Guen. Phal.* i. 188.

Body hardly robust. Vertex flat, declining, triangular. Front of one colour, forming an acute keel between the palpi. Palpi smooth, extending a little beyond the front; second joint broad. Antennæ of the male cylindrical, filiform. Abdomen of the female long, depressed, ovate-obtuse at the tip. Legs slender, smooth; hind tibiæ with four filiform approximate rather long spurs. Wings very ample, entire; line straight. Fore wings very acute and falcate.

#### 1. SARCINODES CARNEARIA.

Fœm. *Pallide ferrugineo-rosea; alæ atomis nigris, lineis duabus obliquis concis rectis 'parallelis fimbriaque ferrugineis, linea 2o roseo marginata; anticæ costa ferruginea, linea interiore nigra arcuata indeterminata; posticæ linea 1a obscuriore.*

*Sarcinodes carnearia*, *Guen. Phal.* i. 188, 291.

Hindustan.

#### 2. SARCINODES VULTUARIA.

Fœm. *S. carneariæ affinis, major; palpi articulo 3o longiore; alæ nigro magis conspersæ, ferrugineo non tinctæ, spatio marginali obscuriore, linea 1a supra vix conspicua, 2a bene determinata; anticæ linea costali ochracea tenui interrupta; posticæ macula magna media sulphurea.*

*Sarcinodes vultuaria*, *Guen. Phal.* i. 189, 292.

Borneo.

## Genus 7. HYPOGRAPHA.

*Mas et fœm.* Corpus incrassatum. Fasciculus frontalis conicus. Palpi glabri, crassi, oblique ascendentes; articulus 3us longiconicus. Thorax convexus, lanuginosus. Abdomen alas posticas superans, apice quadratum. Pedes breves, sat graciles; tibiæ posticæ calcaribus quatuor longis. Alæ spissæ, margine exteriori convexo dentato; anticæ acutæ, costa recta.

Hypographa, Guen. *Phal.* i. 189.

*Male and female.* Body very thick. Vertex prominent; front with a conical tuft. Palpi smooth, thick, obliquely ascending, not rising higher than the vertex; third joint elongate-conical, less than half the length of the second. Thorax convex, lanuginous. Abdomen extending rather beyond the hind wings, quadrate at the tip, where there are thick brushes of hairs. Legs short, rather slender; hind tibiæ with four long spurs. Wings stout; exterior border convex, strongly dentated. Fore wings acute; costa straight.

## 1. HYPOGRAPHA PHLEGETONARIA.

*Murino-cinerea; alæ lineis transversis indistinctis denticulatis obscurioribus, subtilus ex parte rufescente-ferrugineæ, lineis duabus bene determinatis.*

Hypographa Phlegetonaria, Guen. *Phal.* i. 190, 293, pl. 19, f. 2.

a. Australia. Presented by E. Doubleday, Esq.

b. Australia.

c. Moreton Bay. From Mr. Diggles' collection.

d. Sydney. From Mr. Lambert's collection.

## 2. HYPOGRAPHA PRIVATA.

*Mas et fœm.* Cinerea; abdomen punctis lateralibus nigris; alæ nigricante subconspersæ, fascia lata obliqua denticulata purpurascens-rufa albido marginata; anticæ falcatae, costa nigro punctata.

*Male and female.* Cinereous. Abdomen with black points along each side. Wings with very minute blackish speckles, and with a broad oblique denticulated purplish red whitish-bordered band, which is much more distinct on the under side, as are also the elongated blackish points of the fringe; exterior border less denticulated than in the typical species. Fore wings falcate; costa with

black points. Length of the body 5—7 lines; of the wings 10—14 lines.

a. Australia. From Mr. Saunders' collection.

### Genus 8. NIGASA.

*Mas.* Corpus sat robustum. Caput et thorax pilosa. Proboscis capitis latitudine multo longior. Palpi porrecti, caput non superantes; articulus 2us 1o longior; 3us parvus, brevis, conicus. Antennæ latissime pectinatæ, corporis dimidio multo longiores. Abdomen pubescens, alas posticas non superans. Pedes longiusculi, sat graciles; tibiæ tarsique fere nuda; tibiæ posticæ calcaribus parvis apicalibus. Alæ latæ.

*Male.* Body moderately stout. Head and thorax pilose. Proboscis rather long, much exceeding the breadth of the head. Palpi porrect, not extending beyond the head; second joint longer than the first; third joint small, conical. Antennæ very deeply pectinated, much more than half the length of the body. Abdomen pubescent, extending as far as the hind wings. Legs rather long and slender; tibiæ and tarsi almost bare; hind tibiæ with two small spurs. Wings broad. Fore wings straight along the costa, somewhat angular at the tips, very oblique along the exterior border; interior angle rounded.

#### 1. NIGASA SUBPURPUREA.

*Mas.* Cinereo-cervina, subtus albida; antennæ albidæ ramis pallide fuscis; abdomen nitens; alæ anticæ fascia obliqua e guttis nigris maculaque subtus maxima purpureo-fusca subapicali; posticæ fasciis duabus maculaque purpurascens.

*Male.* Grayish fawn-colour, whitish beneath. Proboscis tawny. Antennæ whitish, with pale brown branches. Abdomen shining. Fore wings with a few black dots forming an oblique band beyond the middle, and with a black spot on the interior border at two-thirds of the length; under side with a very large purple-black subapical spot, which is accompanied by a streak on each side. Hind wings shining, with two purplish bands, one discal and accompanied on the inner side by a purplish spot, the other broader and submarginal. Length of the body 9—11 lines; of the wings 25—28 lines.

a. Tasmania. Presented by Morton Allport, Esq.

b. Tasmania. Presented by R. Butler, Esq.

## Genus 9. COLUSSA.

*Fœm.* Corpus crassum, densæ lanuginosum. Palpi breves porrecti, pilosissimi, caput vix superantes; articulus 3us conicus 2i dimidio non brevior. Antennæ subpectinatæ. Abdomen alas posticas non superans. Pedes robusti, dense lanuginosi; tibiæ posticæ calcaribus apicalibus parvis. Alæ amplæ, validæ, densæ vestitæ, margine exteriori convexo; anticæ falcatæ, costa subconvexa margine exteriori subobliquo; posticæ angulo rotundato bene determinato.

*Female.* Body very thick, densely woolly. Palpi short, porrect, very pilose, hardly extending beyond the head; third joint conical, about half the length of the second. Antennæ minutely pectinated. Abdomen extending as far as the hind wings. Legs stout; femora and tibiæ densely woolly; hind tibiæ with minute apical spurs. Wings ample, robust, densely clothed; exterior border convex. Fore wings falcate; costa slightly convex; exterior border slightly oblique. Hind wings with the interior angle rounded and very prominent.

## 1. COLUSSA ODENESTARIA.

*Fœm.* Pallide cinereo-cervina; caput nigro fasciatum; palpi nigri; antennæ flavæ; alæ lineis duabus interioribus ferrugineis diffusis valde undulatis et incompletis, linea exteriori flava obliqua vix undulata intus fusco marginata; antica linea exteriori postica extus rufescente marginata, linea adhuc exteriori nigra undulata; posticæ rufescente suffusæ, linea angulosa nigra.

*Female.* Pale cinereous fawn-colour. Head with a black band in front. Palpi mostly black. Antennæ bright sulphur-colour. Legs hoary, black-speckled; knees white. Wings with two diffuse very undulating and incomplete ferruginous interior lines; a yellow exterior oblique hardly undulating line, which is bordered with brown on the inner side; fringe fawn-colour, whitish-tipped. Fore wings with the exterior line near the interior border broadly reddish-bordered on the outer side; this reddish hue limited by a black undulating line, beyond which there are some reddish speckles. Hind wings with a diffuse reddish hue, and with a black zigzag line along the whole length of the yellow line; the yellow and the reddish hue repeated slightly and diffusedly beyond the black line. Length of the body 11 lines; of the wings 30 lines.

*a, b.* Australia. From Mr. Damel's collection.

## Genus 10. DIAMUNA.

*Mas.* Corpus crassum. Fasciculus frontalis productus. Palpi validi, subascendentes, caput sat superantes; articulus 3us longus, cylindricus; antennæ late pectinatæ, apice nudæ. Pectus dense lanuginosum. Abdomen latum, lineare, apice quadratum. Pedes sat graciles; femora lanuginosa; tibiæ posticæ calcaribus duobus parvis. Alæ amplæ, fimbria brevissima; anticæ falcatæ, costa recta, margine exteriori convexo valde obliquo; posticæ angulo interiore rotundato, margine interiore dense fimbriato.

*Male.* Body thick. Frontal tuft prominent. Proboscis robust. Palpi stout, slightly ascending, extending somewhat beyond the head; third joint cylindrical, about half the length of the second. Antennæ rather long, broadly pectinated, bare towards the tips. Pectus densely lanuginous. Abdomen broad, linear, quadrate at the tip. Legs rather slender; femora lanuginous; hind tibiæ with two short apical spurs. Wings ample; fringe very short. Fore wings falcate; costa straight; exterior border convex, very oblique. Hind wings with the interior angle rounded; interior border densely fringed.

## 1. DIAMUNA GASTROPACHARIA.

*Mas.* Cinereo-cervina; antennæ ochraceæ; abdomen roseum, basi album; alæ nigro subconsperse; anticæ lineis tribus ochraceis rectis obliquis parallelis fusco marginatis; posticæ roseæ, bilineatæ, subtus cervinæ plaga postica fuscescente.

*Male.* Cinereous fawn-colour, paler beneath. Antennæ ochraceous. Abdomen and legs rosy; the former white at the base, black-speckled beneath. Wings minutely black-speckled. Fore wings with three straight oblique parallel ochraceous brown-bordered lines; first line indistinct; under side mostly rosy. Hind wings rosy, with two lines, fawn-coloured along the interior border, which has a white fringe; under side fawn-colour, with a brownish patch on the exterior border; interior border white. Length of the body 9 lines; of the wings 22 lines.

♂. Swan River. Presented by Sir J. Richardson.

## Genus 11. BALLIACE.

*Fam.* Corpus crassum. Frons fasciculata. Proboscis valida. Palpi crassi, angulati, oblique ascendentes, dense pilosi; articulus

*3us brevissimus.* Antennæ glabræ. Abdomen alas posticas vix superans. Pedes sat graciles, non pilosi; tibiæ posticæ calcaribus quatuor sat longis. Alæ elongatæ, margine exteriori vix flexo; anticæ longæ, falcatæ, costa recta, margine exteriori postico valde obliquo; posticæ angulo interiore subproducto.

*Female.* Body thick. Front with a prominent tuft. Proboscis stout. Palpi thick, obliquely ascending, densely pilose; third joint conical, not more than one-fourth the length of the second, with which it forms an angle. Antennæ simple. Abdomen hardly extending beyond the hind wings. Legs rather slender, not pilose; hind tibiæ with four moderately long spurs. Wings elongate; exterior border hardly bent. Fore wings long, very acutely falcate; costa straight; exterior border very oblique hindward. Hind wings with the interior angle slightly prominent.

#### 1. BALLIACE VETUSTARIA.

*Fœm.* *Rufescente-cinerea; alæ rufescentes, nigro subconspersæ, linea recta pallide cinerea, fimbria saturate rufa; anticæ subtus plaga postica nigricante purpurea antice diffusa et rufescente lituraque discali oblonga rufescente.*

*Female.* Reddish cinereous, paler beneath. Wings mostly reddish, with minute black speckles, which are most distinct on the under side, and with a straight pale cinereous line, which extends from near the tips of the fore wings to two-thirds of the interior border of the hind wings; fringe dark red. Fore wings beneath with a blackish purple patch, which is diffuse and reddish in front, and there approaches an oblong reddish discal mark. Length of the body 9 lines; of the wings 22 lines.

*a.* Australia.

#### Genus 12. CHOARA.

*Mas.* Corpus sat robustum. Proboscis brevis. Palpi subascendentes, subangulati; articulus 3us brevissimus. Antennæ validæ, simplices. Abdomen alas posticas vix superans. Pedes robusti; tibiæ posticæ valde incrassatæ, calcaribus quatuor parvis remotis. Alæ elongatæ; anticæ falcatæ, costa recta, margine exteriori convexo valde obliquo; posticæ margine exteriori subrecto, angulo interiore producto.

*Male.* Body moderately stout. Proboscis not long. Palpi slightly ascending, not rising above the head; third joint conical, somewhat porrect, about one-fourth the length of the second, with

which it forms a slight angle. Antennæ stout, simple. Abdomen hardly extending beyond the hind wings. Legs stout; hind tibiæ much incrassated, with four short spurs, the pairs remote from each other. Wings elongate. Fore wings falcate; costa straight; exterior border convex, very oblique. Hind wings with the exterior border nearly straight; interior angle very prominent.

### 1. CHOARA SIOULOIDES.

**Mas.** *Cinereo-cervina; caput albido fasciatum; pedes nigricante conspersi; alæ nigro aut fusco subconsersæ, linea exterior recta obliqua e punctis nigris, punctis marginalibus nigris; anticæ linea interiore e punctis nigris, plagis duabus submarginalibus albo notatis; posticæ subtus plaga discali nigricante.*

**Male.** Cinereous fawn-colour. Head with a whitish band between the antennæ. Legs thickly blackish-speckled. Wings minutely black- or brown-speckled, with a straight oblique exterior line of black points, and with black marginal points; the exterior points are accompanied by a pale faint line, which is only distinct where it touches these points. Fore wings with an interior line of points and with two submarginal patches, which are composed of black speckles and contain some white speckles. Hind wings beneath with a blackish spot in each disk. Length of the body 6—8 lines; of the wings 14—18 lines.

a. South Australia. Presented by R. Bakewell, Esq.

b. Australia. From Mr. Damel's collection.

c. Tasmania. Presented by Morton Allport, Esq.

### Genus 13. FISERA.

**Mas.** *Corpus robustum. Fasciculus frontalis productus. Proboscis brevis. Palpi validi, porrecti, caput non superantes; articulus 3us minimus. Antennæ late pectinatæ. Thorax et abdomen cristata, hoc subcompressum. Pedes robusti; femora pilosi; tibiæ posticæ calcaribus quatuor inæqualibus. Alæ amplæ fimbria brevi; anticæ subsalcatæ, costa recta, margine exterior subconvexo subobliquo; posticæ angulo interiore rotundato.*

**Male.** Body stout. Frontal tuft prominent. Proboscis short. Palpi stout, porrect, not extending beyond the head; third joint conical, less than one-fourth the length of the second. Antennæ broadly pectinated to the tips. Thorax and abdomen crested; the latter somewhat compressed. Legs stout; femora pilose; hind

tibiæ with four spurs, the apical pair much shorter than the first pair. Wings ample; fringe short. Fore wings subfalcate; costa straight; exterior border slightly convex and oblique. Hind wings with the interior angle rounded.

#### 1. FISERA PERPLEXATA.

**Mas.** *Ochracea; caput et thorax rufescente-ferruginea, subpurpurascens; abdomen testaceum, alæ anticæ nigro conspersæ, guttis duabus discalibus nigris; posticæ fuscescente-cervinæ, subtus albidæ, margine guttaque discali fuscescente-cervinis.*

**Male.** Ochraceous. Head and thorax reddish ferruginous, with a purplish tinge. Abdomen and legs testaceous. Fore wings irregularly black-speckled, somewhat darker towards the interior and exterior borders, with a black discal dot and with a smaller dot hindward and nearer the base. Hind wings brownish fawn-colour, whitish in front; under side whitish, with a brownish fawn-coloured border and with a discal dot of the same hue. Length of the body 8 lines; of the wings 20 lines.

Tasmania. In Mr. Saunders' collection.

#### Genus 14. MERGANA.

**Fœm.** Corpus crassum. Fasciculus frontalis productus. Palpi angulati, validi, pilosi, oblique ascendentes; articulus 3us minimus. Antennæ glabræ, sat graciles. Abdomen alas posticas non superans. Pedes robusti; femora pilosa; tibiæ posticæ calcaribus duobus longiusculis. Alæ amplæ; anticæ falcatæ, costa recta, margine exteriore subconvexo valde obliquo; posticæ angulo interiore producto.

**Female.** Body thick. Frontal tuft prominent. Proboscis robust. Palpi stout, pilose, obliquely ascending, not rising higher than the vertex; third joint fusiform, about one-fourth the length of the second, with which it forms a distinct angle. Antennæ smooth, rather long and slender. Abdomen not extending beyond the hind wings. Legs stout; femora pilose; hind tibiæ with two rather long apical spurs. Wings ample. Fore wings falcate; costa straight; exterior border slightly convex, very oblique. Hind wings with the interior angle prominent, rectangular.

#### 1. MERGANA ÆQUILINEARIA.

**Fœm.** *Alba, robusta, fusco conspersa, subtus purpurascens; caput et thorax anticus rufescente-cinerea; fasciculus frontalis porrectus; palpi ascendentes, angulati, articulo 3o porrecto;*



*antennæ validæ ; femora pilosa ; alæ elongatæ, nitentes, nigro subconspersæ, lineis tribus parallelis reetis obliquis, 1a 2aque rufis, 2a testaceo marginata, 3o fusco flavo marginata, linea submarginali testacea informi incompleta nigro notata.*

**Female.** White, stout, minutely brown-speckled. Body purplish beneath. Head and fore part of the thorax reddish cinereous. Frontal tuft prominent. Palpi obliquely ascending, not rising higher than the vertex ; third joint porrect, elongate-conical, about one-fourth the length of the second, with which it forms an obtuse angle. Antennæ stout. Femora pilose ; hind tibiæ not thickened ; spurs short. Wings elongate, shining, slightly and minutely black-speckled, with three parallel straight oblique lines ; first and second lines red ; first line not extending to the hind wings ; second testaceous-bordered exteriorly ; third brown, yellow-bordered interiorly ; submarginal line testaceous, irregular, incomplete, black-marked on the veins ; costa ferruginous ; under side purplish, with very numerous little transverse blackish streaks, and with a red line which corresponds to the second line above ; an exterior diffuse yellow band, marked with black points on the veins ; space beyond mostly ochraceous. Length of the body 9 lines ; of the wings 26 lines.

**a, b. Silhet.** Presented by E. Doubleday, Esq.

### Genus 15. NISISTA.

**Mas.** Corpus robustum. Fasciculus frontalis subascendens, non productus. Proboscis brevis. Palpi porrecti, caput non superantes ; articulus 3us minimus. Antennæ late pectinatæ. Thorax dense vestitus. Abdomen apicem versus attenuatum, alas posticas vix superans. Pedes breviusculi, sat graciles ; femora late fimbriata ; tibiæ posticæ calcaribus quatuor longis. Alæ latæ, non longæ, margine exteriori subdentata ; anticæ acutæ, costa recta, margine exteriori vix convexo ; posticæ angulo exteriori non producto.

**Male.** Body robust. Frontal tuft slightly ascending, not prominent. Proboscis short. Palpi porrect, very short, not extending beyond the head ; third joint very minute. Antennæ broadly pectinated to the tips. Thorax densely clothed. Abdomen hardly extending beyond the hind wings, somewhat attenuated towards the tip ; apical tuft radiating. Legs rather short and slender ; femora broadly fringed ; hind tibiæ with four long spurs. Wings broad, not long ; exterior border slightly scalloped. Fore wings acute ;

costa straight; exterior border moderately oblique, hardly convex. Hind wings with the interior angle not prominent.

### 1. NISISTA NOTODONTARIA.

**Mas.** *Albido-cinerea; thorax fasciis duabus ferrugineis nigro marginatis; alæ anticæ nigro conspersæ, ex parte ferrugineo tinctæ, lineis quatuor transversis nigris, 1a basali, 2a valde arcuata, 3a undulata duplicata, 4a angulosa postice obsoleta, lunulis marginalibus nigris; posticæ linea una denticulata, subtus marginem versus ferrugineæ, lunula discali nigra.*

**Male.** Whitish cinereous. Thorax with two ferruginous black-bordered bands. Abdomen and under side ferruginous-tinged, black-speckled. Fore wings black-speckled, partly ferruginous-tinged, with four irregular transverse black lines; first line very near the base; second much curved; third undulating, double; fourth zig-zag, obsolete except in front; marginal lunules black. Hind wings with one slight denticulated line, corresponding to the third line of the fore wings; under side ferruginous exteriorly, with the line more distinct and with a black discal lunule. Length of the body 6 lines; of the wings 16 lines.

**a. Tasmania.** Presented by Morton Allport, Esq.

### Fam. 4. AMPHIDASYDÆ.

Corpus crassum, valde pilosum. Caput parvum, occultum. Proboscis brevis aut nulla. Palpi occulti aut subobsoleti. Thorax valde convexus, postice quadratus. Pedes breves; femora villosa; calcaria brevia, approximata; tarsi unguibus crassis arcuatis. Alæ spissæ, rude squamosæ; fimbria plena; anticæ apices versus sæpissimæ elongatæ et trigonæ. **Mas.**—Antennæ pectinatæ aut plumosæ. **Fæm.**—Antennæ graciles, cylindricæ, setacæ. Alæ sæpe brevissimæ, aut nullæ.

**Amphidasydæ, Guen. Phal. i. 190.**

Body thick, very hairy. Head small, hidden by the prothorax. Proboscis short or none. Palpi concealed by the hairs, or almost obsolete. Thorax very convex, quadrate hindward. Legs short; femora villose; spurs short, approximate; tarsi with very robust and curved claws. Wings thick, roughly squamous; fringe full. Fore wings generally elongated towards the tips and triangular. **Male.**—Antennæ pectinated or plumose. **Female.**—Antennæ slender, cylindrical, setaceous. Wings often rudimentary or none.

**A. Tibiæ posticæ non gracillimæ.****A. Proboscis distincta.**

- |                          |   |   |   |                                  |
|--------------------------|---|---|---|----------------------------------|
| a. Calcaria remota.      | - | - | - | 1. METICULODES, <i>Guen.</i>     |
| b. Calcaria approximata. | - | - | - | 8. AMPHIDASYS, <i>Treit.</i> 305 |

**B. Proboscis subobsoleta aut obsoleta.****A. Tibiæ quadricalcaratæ.**

- |                        |   |   |   |                            |
|------------------------|---|---|---|----------------------------|
| a. Calcaria parva.     | - | - | - | 2. CEBATONYX, <i>Guen.</i> |
| b. Calcaria sat longa. | - | - | - | 3. PHIGALIA, <i>Dup.</i>   |

**B. Tibiæ bicalcaratæ.****a. Alæ non oblongæ.**

- |                         |   |   |                               |
|-------------------------|---|---|-------------------------------|
| i. Tarsi depressi.      | - | - | 4. CHONDROSOMA, <i>Anker.</i> |
| ii. Tarsi non depressi. | - | - | 7. BISTON, <i>Leach.</i>      |

**b. Alæ oblongæ.**

- |                      |   |   |                                 |                        |
|----------------------|---|---|---------------------------------|------------------------|
| i. Palpi obsoleti.   | - | - | -                               | 5. NYSSIA, <i>Dup.</i> |
| ii. Palpi distincti. | - | - | 6. APOCHEIMA, <i>Herr.-Sch.</i> |                        |

- |                              |   |   |                           |
|------------------------------|---|---|---------------------------|
| B. Tibiæ posticæ gracillimæ. | - | - | 9. LOPHODES, <i>Guen.</i> |
|------------------------------|---|---|---------------------------|

**Genus 1. METICULODES.**

**Mas.** Corpus incrassatum. Proboscis robusta. Palpi contigui, breves; articulus 3us distinctus, brevissimus, valde obtusus. Antennæ filiformes, cylindricæ, nudæ. Thorax robustus, lanuginosus. Pectus villosum. Abdomen cylindricum, apice quadratum et fasciculatum. Pedes longi; tarsi spinosi; tibiæ posticæ non incrassatæ; calcaria brevia, remota. Alæ oblongæ; fimbria brevis, scite dentata; anticæ apice rotundatæ et valde obtusæ, basi et apud costam squamoso-villosæ.

*Meticulodes. Guen. Phal. i. 192.*

**Male.** Body very thick. Proboscis robust. Palpi conniving, short; third joint distinct, very short and obtuse. Antennæ filiform, cylindrical, bare. Thorax robust, lanuginous. Pectus villose. Abdomen cylindrical, quadrate and tufted at the tip. Legs long; tarsi spinose; hind tibiæ non-incrassated; spurs short, the pairs remote from each other. Wings oblong; fringe short, finely denticulate. Fore wings rounded and very obtuse at the tips, squamous-villose along the costa and at the base.

**1. METICULODES SPONGIATA.**

**Mas.** *Ochracea; alæ anticæ extus fusco late vittatæ, plaga postica magna olivacea lineam albam undulatum includente; posticæ plagis duabus anticis albis, plaga apud angulum interiorem e punctis nigris strigam albam includente.*

*Meticulodes Spongiata*, *Guen. Phal.* i. 193, 294, pl. 19, f. 7.  
Brazil.

## 2. METICULODES XYLOCHROMARIA.

*Mas.* *Cervina*; *thorax fusco subvarius*; *alæ punctis marginalibus nigris*; *anticæ nigro subconspersæ, fusco ex parte strigatæ, vitta interrupta subarcuata nigricante, linea exteriori nigra subdenticulata valde arcuata*; *posticæ denticulatæ, linea fusca subrecta*.

*Male.* Fawn-colour. Thorax slightly varied with brown. Wings with black marginal points. Fore wings thinly and minutely speckled with black, with transverse brown streaks near the base and towards the exterior border; a slightly curved blackish interrupted stripe commencing near the base of the interior border, and extending to a much curved slightly denticulated black line, which is dilated towards the interior border. Hind wings denticulated, with a nearly straight brown line, which corresponds to the line of the fore wings. Length of the body 6 lines; of the wings 18 lines. Brazil. In Mr. Saunders' collection.

## Genus 2. CERATONYX.

*Mas.* *Corpus vix robustum. Frons plana, glabra. Proboscis et palpi subobsoleti. Antennæ pectinatæ, brevissimæ. Thorax lanuginosus, brevissimus. Abdomen longum, cylindricum, apice e pilis parvis squamosis trifasciculatum. Pedes glabri, brevissimi; tibiæ posticæ calcaribus parvis valde approximatis. Alæ spissæ, villosæ, sericæ, subdentatæ; anticæ valde oblongæ, costa subrecta.*  
*Ceratonyx*, *Guen. Phal.* i. 193.

*Male.* Body hardly stout. Front flat, smooth. Proboscis and palpi rudimentary. Antennæ very short, pectinated to the tips. Thorax lanuginous, very short. Abdomen long, cylindrical, with short squamous apical hairs, which form three tufts. Legs smooth, very short; hind tibiæ with short and very approximate spurs. Wings very stout, villose, silky, slightly dentated. Fore wings very oblong; costa almost straight.

### 1. CERATONYX SATANARIA.

*Nigro-fusca; alæ albido variæ; anticæ lineis tribus transversis saturatioribus, 1a 2aque arcuatis parallelis, 3a angulata, strigis duabus subapicalibus unaque basali.*

*Ceratomyx Satanaria*, *Guen. Phal.* i. 194, 295.

Georgia.

## 2. CERATONYX CARMELITARIA.

*Mas. Fusca, rufescente varia; thorax cinereo varius, fascia postica nigro-fusca; alæ anticæ spatio magno discali lineaque exteriori undulata cervinis, strigis nonnullis nigris, fascia exteriori fusca lineaque adhuc exteriori nigra subrectis; posticæ litura discali lineisque duabus exterioribus arcuatis nigris.*

*Ceratomyx Carmelitaria*, *Guen. Phal.* i. 194, 295, pl. 3, f. 6.

Brazil.

## Genus 3. PHIGALIA.

Corpus sat gracile. Frons pilosa, sulcata. Proboscis obsoleta. Palpi brevissimi, vix conspicui. Thorax quadratus, pilosissimus. Abdomen gracile, subconicum, hirsutum. Pedes graciles, sat longi; femora pilosa; tibiæ posticæ calcaribus quatuor sat longis. Alæ amplæ, integræ, nebulosæ, fimbria longa squamosa pallida; anticæ trigonæ, elongatæ, apice rotundatæ, costa margineque exteriori rectis.

*Apocheima*, p., *Hübner. Verz. Schm.* 319.

*Phigalia*, *Dup. Lep.* iv. 296. *Steph. Leder. Guen. Phal.* i. 195.

*Amphidasys*, p., *Treit. Herr.-Sch.*

*Hibernia*, p., *Boisd.*

Body comparatively slender. Front pilose, with a furrow in the middle. Proboscis obsolete. Palpi short, hardly conspicuous. Thorax quadrate, very pilose. Abdomen slender, hirsute, subconical. Legs slender, moderately long; femora pilose; hind tibiæ with four rather long spurs. Wings ample, entire, clouded; fringe long, squamous, pale. Fore wings triangular, elongated towards the tips, which are rounded; costa and exterior border straight.

## 1. PHIGALIA PILOSARIA.

*Mas. Cinerea, olivaceo suffusa, fusco conspersa; thorax fusco fasciatus; alæ anticæ fasciis undulatis indistinctis diffusis fuscescentibus, venis nigro lineolatis; posticæ pallidiores lineis duabus bene determinatis.*

———, *Albin, Ins.* pl. 91, e—h. *Wilk. Pap.* 87. *Sepp. Ins.* iii. pl. 11. *De Vill. Ent. Linn.* iv. 498.

*Geometra pilosaria*, *Wien. Verz.* 100, 6. *Hübner. Geom.* pl. 34, f. 176. *Illig. N. Ausg. dess.* i. 378, 6; *N. Mag.* ii. 154, 6.

- Phalæna pedaria*, *Fabr. Mant. Ins.* ii. 191, 58; *Ent. Syst.* iii. 2148, 7. *Brahm, Ins.* 149. *Borkh. Eur. Schm.* v. 195, 79. *Haw. Lep. Brit.* 274. *Lah.* 163.
- *Phalæna Geometra pedaria*, *Gmel. ed. Syst. Nat.* i. 5, 2468, 691.
- Phalæna hyemaria*, *Borkh. Eur. Schm.* v. 195, 78.
- Geometra plumaria*, *Esp. Schm.* v. 195, pl. 35, f. 1, 2.
- Apocheima pilosaria*, *Hubn. Verz. Schm.* 319, 3079.
- Amphidasys pilosaria*, *Treit. Schm.* vi. i. 240, 4. *Herr.-Sch. Eur. Schm.* iii. 101, 274.
- Phigalia pilosaria*, *Dup. Lep.* iv. 298, pl. 155, f. 1, 2. *Steph. Ill. Brit. Haust.* iii. 156. *Guen. Phal.* i. 196, 297.
- Amphidasys extinctaria*, *Standf. Ent. Zeit. Stett.* viii. 63. *Herr.-Sch. Suppl.* 75, fig. 457, 458.
- Hibornia pilosaria*, *Boisd. Ind.* 194, 1533.
- a—c.* England. Presented by H. Doubleday, Esq.
- d—v.* England. From Mr. Stephens' collection.
- u—y.* England.
- z—aa.* Scotland. From Mr. Dove's collection.
- bb—cc.* Europe. From M. Becker's collection.

#### Genus 4. CHONDROSOMA.

*Mas.* Corpus robustum, e pilis sericeis densissime vestitum. Caput occultum. Proboscis obsoleta. Palpi subobsoleti. Antennæ pectinatæ. Abdomen breve, pustulis elevatis lituratum. Pedes gracillimi; femora pilosa; tibiæ posticæ calcaribus duobus; tarsi depressi. Alæ integræ, apice rotundatæ, non oblongæ, lituris indeterminatis; anticæ costa concava.

*Chondrosoma*, *Anker, Verhandl. Zool. Bot. Ver. Wien.*; *Guen. Phal.* i. 197.

Body robust, thickly clothed with silky hairs, which completely hide the head. Proboscis obsolete. Palpi rudimentary. Antennæ moderately pectinated. Abdomen short, with regular protuberant points on the disks of the segments. Legs very slender; femora pilose; hind tibiæ with one pair of spurs; tarsi flattened. Wings entire, rounded at the tips, not oblong; the markings not well defined. Fore wings with the costa concave.

##### 1. CHONDROSOMA FIDUCIARIA.

*Mas.* Nigro-cinerea; thorax albidus; abdomen nigricans; alæ semihyalinæ, fimbria alba; antica macula discali magna divisa lineaque exteriore albis.

*Chondrosoma fiduciaria*, *Anker, Verhandl. Zool. Bot. Ver. Wien. Guen. Phal. i. 198, 298, pl. 21, f. 7, Hungary.*

### Genus 5. NYSSIA.

*Mas.*—Corpus robustum. Caput occultum. Proboscis et palpi obsoleti. Antennæ plumosæ. Thorax crassus, pilosissimus. Abdomen breve, conicum, hirsutum. Pedes graciles, pilosi; tibiæ posticæ calcaribus duobus apicalibus parvis. Alæ integræ, oblongæ, squamosæ, semihyalinæ, nebulosæ, venis validis bene determinatis; anticæ elongatæ, costa recta aut subconcaua. *Fæm.*—Aptera.

*Nyssia*, *Dup. Lep. iv. 283. Boisd.; Steph.; Guen. Phal. i. 198.*

*Apochima*, p., et *Ithysia*, p., *Hubn. Verz. Schm. 319.*

*Amphidasys*, p., *Treit.; Herr.-Schr.*

*Biston*, p., *Lederer.*

Body stout. Head concealed by the hairs. Proboscis and palpi obsolete. Thorax very thick and pilose. Abdomen short, conical, hirsute. Legs slender, pilose; spurs two, small, apical. Wings entire, oblong, squamous, semihyaline, clouded; veins stout, prominent. Fore wings elongate; costa straight or slightly concave.

*Male.* Antennæ plumose.

### Europe.

A. Thorax albus. - - - - - *bombycaria, Guen.*

B. Thorax albo varius. - - - - - *zonaria, Wien. Verz.*

C. Thorax obscurus.

A. Antennæ nigræ.

Δ. Alæ posticæ cineræ.

a. Fimbria notata.

i. Antennæ pectinatæ. - - - *pomonaria, Hubn.*

ii. Antennæ subpectinatæ. - - - *lanaria, Eversm.*

b. Fimbria vix notata. - - - *lapponaria, Boisd.*

β. Alæ posticæ albidæ. - - - *liquidaria, Eversm.*

B. Antennæ luteæ - - - *hispidaria, Wien. Verz.*

### 1. NYSSIA ZONARIA.

*Mas.* Albida; thorax fusco bivittatus; abdomen nigrum, segmentis fulvo marginatis; alæ fasciis quatuor obliquis fuscis, 1a abbreviata; 2a undulata, 3a 4aque approximatis, hac marginali; posticæ linea 1a obsoleta.

———, *Réaum. Ins. ii. 390, pl. 31, f. 6—8. Naturf. xii. pl. 1, f. 17.*

*Bombyx zona*, *Fabr. Mant. Ins.* ii. 131, 192; *Ent. Syst.* iii. 474, 219.

*Phalæna-Bombyx Zona*, *Gmel. ed. Syst. Nat.* i. 5, 2439, 574.

- *Geometra zonaria*, *Wien. Verz.* 100, 5. *Lang. Verz.* ii. 177, 1230. *Götze, Ent. Beytr.* iii. 3, 391, 109. *Brahm, Ins.* 306. *Schwarz Ins.* 63, pl. 9. *Schr. Faun. Boic.* ii. 2, 12, 1624. *Ill. N. Ausg. dess.* i. 378, 5. *Fuess. N. Mag.* iii. 2, 143, 9. *Bork. Eur. Schm.* v. 200, 83. *Esp. Schm.* v. 190, pl. 34, f. 1—3. *Hubn. Eur. Schm.* pl. 34, f. 179; pl. 99, f. 511.

*Ithysia zonaria*, *Hubn. Verz. Schm.* 319, 3080.

*Amphidasys zonaria*, *Treit. Schm.* v. 1, 251, 8. *Herr.-Sch. Eur. Schm.* iii. 100, 269.

*Nyssia zonaria*, *Dup. Lép.* iv. 283. *Curt. Brit. Ent.* pl. 615. *Steph. Ill. Brit. Haust.* iv. 391. *Boisd. Ind.* 195, 1537. *Guen. Phal.* i. 199, 299.

*Biston zonaria*, *Lederer.*

*a, b.* England. Presented by J. C. Dale, Esq.

*c—r.* England. From Mr. Stephens' collection.

*s, t.* England.

*v.* Scotland. From Mr. Foxcroft's collection.

*u—x.* Europe. From M. Becker's collection.

*y, z.* Europe. From Mr. Milne's collection.

## 2. NYSSIA BOMBYCARIA.

*N. zonaria paullo major; thorax albo pilosus; abdomen cinereo-testaceum; alæ albidae, fasciis quinque nigro-fuscis.*

*Nyssia bombycaria*, *Boisd. Ind.* 195, 1536. *Lah.* 161, f. 5. *Guen. Phal.* i. 200, 300.

Valais, Lombardy.

## 3. NYSSIA GRÆCARIA.

*Nyssia græcaria*, *Boisd. Ind.* 195, 1538. *Guen. Phal.* i. 200, 301.

Morea.

This species has not yet been described.

## 4. NYSSIA ALPINARIA.

*Albida; alæ lineis quatuor obliquis nigro-fuscis; antica linea media e punctis elongatis nigris; postica linea la obsoleta, annulo discali nigro.*

———, *Sulz. Abgek. Gesch. Ins.* pl. 21, f. 5, 6. *Scriba,* iii. pl. 17, f. 1—5.



*Geometra alpinaria*, Bork. Eur. Schm. v. 197, 81. Esp. Schm. v. 232, p. 42, f. 2—6. Hubn. Eur. Schm. pl. 34, f. 178, pl. 99, f. 513. Scriba. Beitr. iii. 215, pl. 17, f. 1—5.

*Phalena alpina*, Götze, Ent. Beitr. iii. 3, 63, 94.

*Apocheima alpinaria*, Hubn. Verz. Schm. 319, 3076.

*Amphidasys alpinaria*, Treit. Schm. vi. 1, 244, 5. Herr.-Sch. Eur. Schm. iii. 100, 270.

*Nyssia alpinaria*, Dup. Lep. iv. 287, pl. 154, f. 4, 5. Boisd. Ind. 195, 1535. Guen. Phal. i. 200, 302.

Ragusa. Alps of Switzerland.

#### 5. NYSSIA POMONARIA.

*Mas. Nigricans*; thorax albo fasciatus; abdomen cinereo pilosum; alæ pallide cinereæ; anticæ ochraceo subconspersæ, lineis duabus nigris unaque exteriore fusco-cinerea angulosis obliquis, venis ex parte nigris.

———, Albin, Ins. pl. 97, a—d.

*Geometra pomonaria*, Hubn. Beitr. 11, pl. 4, U; Geom. pl. 34, f. 180. Borkh. Eur. Schm. v. 198, 82. Esp. Schm. v. 193, pl. 34, f. 5—8.

*Apocheima pomonaria*, Hubn. Verz. Schm. 319, 3078.

*Amphidasys pomonaria*, Treit. Schm. vi. 1, 249, 7. Herr.-Sch. Eur. Schm. iii. 100, 272.

*Nyssia pomonaria*, Boisd. Ind. 195, 1539. Guen. Phal. i. 201, 303.

*Nyssia Vertumnaria*, Lefebv. Ann. Soc. Ent. Fr. 1833, 101.

a. Europe. From M. Becker's collection.

b, c. Europe.

#### 6. NYSSIA LAPPONARIA.

*Nigro-cinerea*; corpus rufescente univittatum; alæ anticæ fasciis tribus obliquis saturatioribus; posticæ vix fasciatæ.

*Nyssia pomonaria*, Dup. Lep. iv. 293, pl. 154, f. 1. Lefebv. Ann. Soc. Ent. Fr. 1833, 101, pl. 1, D, f. 6, 7.

*Nyssia lapponaria*, Boisd. Ind. 195, 1540. Guen. Phal. i. 201, 304.

*Amphidasys lapponaria*, Herr.-Sch. Eur. Schm. iii. 100, 271, f. 440.

Lapland.

#### 7. NYSSIA LANARIA.

*N. pomonariæ affinis*, minor, cinerea; antennæ subpectinatae; alæ lituris distinctioribus, fimbria concolori; anticæ lineis duabus nigris, una submarginali cinerea, linea exteriore inæquali maculari.

*Nyssia lanaria*, *Eversm. Bull. Mosc.* 1852, 163. *Guen. Phal.* i. 201, 305.

South Russia.

#### 8. NYSSIA LIQUIDARIA.

*N. pomonariæ affinis, minor; alæ plus hyalinae, tenues, basi latiores, fuscescente-cinereæ, maculis nullis umbratis; antica fascia lata fusca lineis duabus obscurioribus marginata, linea obliqua, 2a margineque exteriori parallelis; posticae albidae venis fuscis, atomis nonnullis marginalibus nigricantibus.*

*Nyssia liquidaria*, *Eversm. Bull. Mosc.* xxi. 3, 222, 13. *Guen. Phal.* i. 202, 306.

South Russia.

#### 9. NYSSIA HISPIDARIA.

*Cinereo-fusca, nigro-conspersa; alæ anticae venis ex parte nigris lineis quatuor obliquis diffusis subundulatis nigris; posticae albido-cinereæ, linea una indistincta fusca.*

*Phalæna hispidaria*, *Wien. Verz.* 99, 4. *Fabr. Sp. Ins.* ii. 191, 59. *Ent. Syst.* iii. 149, 71.

*Phalæna-Geometra hispidaria*, *Gmel. ed. Syst. Nat.* i. 5, 2468, 692.

*Geometra hispidaria*, *Bork. Eur. Schm.* v. 191, 76. *Esp. Schm.* v. 197, pl. 35, f. 3, 4. *Hubn. Geom.* pl. 34, f. 177. *Haw. Lep. Brit.* 274.

*Phalæna ursularia*, *Donov. Engl. Ins.* xiii. pl. 447.

*Apocheima hispidaria*, *Hubn. Verz. Schm.* 319, 3077.

*Amphidasys hispidaria*, *Treit. Schm.* vi. 1, 247, 6. *Herr.-Sch. Eur. Schm.* iii. 101, 273, f. 14.

*Nyssia hispidaria*, *Dup. Lep.* iv. 285, pl. 154, f. 3. *Steph. Ill. Brit. Haust.* iii. 157. *Boisd. Ind.* 195, 1534.

*Nyssia Tauaria*, *Newm. Ent. Mag.* i. 413.

a—j. England. From Mr. Stephens' collection.

k, l. England.

m, n. Europe. From M. Becker's collection.

#### Genus 6. APOCHEIMA.

Corpus breve, crassum. Caput pilosissimum; vertex bene determinatus. Palpi recti, pilis incumbentibus. Thorax latissimus, lanuginosus. Pedes breves, lanuginosi; tibiæ posticæ calcaribus duobus. Alæ integræ, lanceolatæ, valde oblongæ; anticæ acutæ, costa subconcaua, margine exteriori convexo. *Mas.*—Antennæ uniplumosæ. Abdomen conicum, brevissimum, alas posticas non

*superans*. *Fœm.* — Antennæ subpubescentes. Abdomen crassum, alas posticas dimidio superans.

*Apocheima*, *Herr.-Sch. Eur. Schm.* iii. 98. *Guen. Phal.* i. 203.

Body short, very robust. Head very pilose; vertex prominent. Palpi straight, with incumbent hairs. Thorax lanuginous, very broad. Legs short, woolly; hind tibiæ with a single pair of spurs. Wings entire, straight, lanceolate, very oblong. Fore wings acute; costa slightly concave; exterior border convex. *Male*.—Antennæ plumose on one side to the tips. Abdomen very short, very conical, not extending beyond the hind wings. *Female*.—Antennæ slightly pubescent. Abdomen thick, extending for half its length beyond the hind wings.

### 1. APOCHEIMA FLABELLARIA.

*Cinerea; alæ punctis marginalibus nigris; antica lineis quatuor obliquis subangulatis nigricantibus; postica lineis duabus nigricantibus.*

*Nyssia flabellaria*, *Hœger, Deutsch. Ins.* 163, 44, pl. 11. *Lucas, Expl. Alg.*

*Apocheima flabellaria*, *Herr.-Sch. Eur. Schm.* iii. 98, 268, f. 8—10. *Guen. Phal.* i. 203, 308.

Sicily. Algeria. Constantinople.

### Genus 7. BISTON.

Corpus crassum. Frons hirsuta, unicolor, dense pilosa. Proboscis et palpi obsoleti. Thorax dense lanuginosus. Pedes graciles, pilosi, subfiliformes; calcaria brevia, pilosa. Alæ integræ, rugoso-nebulosæ, apice rotundatæ, lineis angulatis; anticæ costa recta, margine exteriori convexo. *Mas.* — Antennæ plumosæ. Abdomen breve, conicum. *Fœm.*—Antennæ simplices. Abdomen sat longum.

*Biston*, *Leach, Edin. Encycl.* ix. 134; *Steph.*; *Herr.-Sch.*; *Led.*; *Guen. Phal.* i. 204.

*Lycia*, p., *Hubn. Verz. Schm.* 319.

*Amphidasys*, p, *Treit. Dup. Boisd.*

Body thick. Front hirsute, thickly clothed, of one colour. Proboscis and palpi obsolete. Thorax thickly lanuginose. Legs slender, pilose; tibiæ and tarsi almost filiform; spurs two, short, pilose,

apical. Wings entire, rounded, rugose, clouded; lines angular. Fore wings straight along the costa; exterior border convex. *Male*. —Antennæ plumose to the tips. Abdomen short, conical. *Female*. —Antennæ simple. Abdomen somewhat longer.

### 1. BISTON HIRTARIA.

*Nigricans, albido conspersa, ochraceo suffusa; alæ anticæ lineis obliquis nigris denticulatis indeterminatis; posticæ pallidiores, lineis tribus indistinctis subrectis.*

———, *Albin, Ins. pl. 39, f. 62. Deg. Ins. i. pl. 22, f. 6. Klém. pl. 34, f. 1—4. Wilk. Pap. 70.*

*Phalæna-Geometra hirtaria, Linn. Faun. Suec. 1236. Clerck, Icon. pl. 7, f. 1. Gmel. ed. Syst. Nat. i. 5, 2468, 693.*

*Phalæna hirtaria, Wien. Verz. 99, 3. Fabr. Mant. Ins. ii. 191, 60; Ent. Syst. iii. 2, 149, 72. Brahm, Ins. ii. 37, 12.*

*Geometra hirtaria, Borkh. Eur. Schm. v. 184, 74. Sepp. Ins. ii. pl. 12, 13. Esp. Schm. v. 165, pl. 29, f. 1—7. Hubn. Geom. pl. 33, f. 175. Haw. Lep. Brit. 273, 3.*

*Geometra congeneraria, Hubn. Geom. f. 174. Haw. Lep. Brit. 273, 4.*

*Geometra fumaria, Haw. Lep. Brit. 273, 5.*

*Lycia hirtaria, Hubn. Verz. Schm. 319, 3074.*

*Amphidasys hirtaria, Treit. Schm. vi. 1, 236, 3. Dup. Lep. iv. 270, pl. 153, f. 5, 6. Boisd. Ind. 195, 1542.*

*Biston hirtaria, Steph. Ill. Brit. Haust. iii. 159. Herr.-Sch. Eur. Schm. iii. 102, 275.*

*Biston necessaria, Zell. Isis, 1847, 18.*

*a—l.* England. From Mr. Stephens' collection.

*m—v.* England.

*u—aa.* Europe. From M. Becker's collection.

*bb, cc.* Europe.

### 2. BISTON URSARIA.

*Mas. Obscure cinerea, crassa, pilosissima, nigro conspersa; antennæ latissime pectinatæ; pedes dense fasciculati; alæ anticæ lineis quatuor obliquis nigris, 1a flexa, 2a 3aque approximatis subundulatis, 4a diffusa; posticæ linea 1a obsoleta, 4a e striga brevi lata postica.*

*Male.* Dark cinereous, speckled with black, very robust and pilose. Antennæ very broadly pectinated. Thorax with three black bands. Legs densely tufted. Fore wings with four black oblique lines; first line bent; second and third lines approximate, slightly

undulating, diverging towards the costa; fourth line diffuse. Hind wings with the first line obsolete; second and third lines apparent; fourth line indicated by a short broad streak near the interior angle. Length of the body 8—9 lines; of the wings 22—24 lines.

*a, b. Canada.* Presented by W. S. M. D'Urbau, Esq.

### 3. BISTON MEXICANARIA.

*Mas.* *Fuscescente-olivacea; caput album; palpi nigri; alæ antica nigro conspersæ, lineis duabus transversis albis, gutta nigra maculaque albida diffusa discalibus contiguis, fimbria alba nigro punctata; postica cinerea, fusco conspersæ, gutta discali nigra.*

*Male.* Brownish olive-colour. Head white. Palpi mostly black. Fore wings transversely and irregularly speckled with black, with two white transverse lines, along part of which the speckles are confluent; a black discal dot with a diffuse whitish spot on its inner side; fringe white, with black points opposite the veins. Hind wings cinereous, minutely speckled with brown; discal dot black. Length of the body 8 lines; of the wings 18 lines.

*a. Mexico.* From Mr. Glennie's collection.

### Genus 8. AMPHIDASYS.

*Corpus crassum. Frons plana, bicolor, non hirsuta. Proboscis et palpi distincti, brevissimi. Antennæ validæ. Thorax brevis, latus, lanuginosus. Pedes robusti; tibiæ posticæ calcaribus quatuor approximatis. Alæ spissæ, opacæ; anticæ elongatæ, apice rotundatæ, costa recta, margine exteriori perobliquo. Mas.*—Antennæ plus minusve pectinatæ. Abdomen conicum. *Fæm.*—Antennæ simplices. Abdomen longius.

*Amphidasys, Treit. Schm. i. 229. Dup.; Boisd.; Led.; Guen. Phal. i. 206.*

*Eubyja, Hubn. Verz. Schm. 318.*

Body thick. Front flat, of two colours, not hirsute. Proboscis and palpi distinct, but very short. Antennæ stout. Thorax short, broad, lanuginous. Legs stout; hind tibiæ with four approximate spurs. Wings stout, opaque. Fore wings elongate, rounded at the tips; costa straight; exterior border very oblique. *Male.*—Antennæ more or less pectinated. Abdomen conical. *Female.*—Antennæ simple. Abdomen cylindric-conical.

## Europe.

## 1. AMPHIDASYS PRODROMARIA.

*Alba, nigro conspersa; alæ anticæ fasciis duabus ferrugineis latis obliquis subundulatis nigro marginatis; posticæ lineis duabus nigricantibus.*

———, *Geoff. Ins.* ii. 118.

*Phalæna prodromaria*, *Wien. Verz.* 99, 1. *Fabr. Mant. Ins.* ii. 195, 87; *Ent. Syst.* iii. 159, 105.

*Phalæna-Geometra prodromaria*, *Gmel. ed. Syst. Nat.* i. 5, 2463, 666.

*Geometra prodromaria*, *Brahm, Ins.* 13. *Borkh. Eur. Schm.* v. 175, 71. *Hubn. Geom.* pl. 33, f. 172. *Haw. Lep. Brit.* 272. *Sepp. Ins.* v. pl. 13. *Ill. N. Ausg. dess.* i. 375, 1.

*Geometra strataria*, *Hufn. Berl. Mag.* iv. 5, 514, 17; *Naturf.* xi. 68, 17.

*Geometra marmorata*, *Sulz. Gesch.* pl. 23, f. 1.

*Geometra marmoraria*, *Esp. Schm.* v. 161, pl. 28, f. 1, 3—5.

*Eubyja prodromaria*, *Hübner. Verz. Schm.* 318, 3072.

*Amphidasys prodromaria*, *Treit. Schm.* vi. 1, 234, 2. *Dup. Lep.* iv. 275, pl. 153, f. 3, 4. *Boisd. Ind.* 196, 1544. *Guen. Phal.* i. 208, 311.

*Biston prodromaria*, *Steph. Ill. Brit. Haust.* iii. 158. *Herr.-Sch. Eur. Schm.* iii. 102, 276.

*a—o.* England. From Mr. Stephens' collection.

*p—u.* England.

*w, x.* Europe. From M. Becker's collection.

## 2. AMPHIDASYS BETULARIA.

*Alba, nigro conferte punctata; alæ lineis deviis angulosis nigris; anticæ lineis costam versus dilatatis.*

———, *Petiv. Gaz.* pl. 7, f. 8. *Albin, Ins.* pl. 40, f. 64; pl. 41, f. 66; pl. 91, 92. *Ammir. Ins.* pl. 21. *Wilk. Pap.* 38, pl. 1. *Schaff. Icon.* pl. 88, f. 4, 5. *Kléem, Ins.* i. pl. 39, f. 6. *Deg. Ins.* i. pl. 17, f. 22; ii. pl. 5, f. 18.

*Phalæna-Geometra betularia*, *Linn. Faun. Succ.* 1287. *Gmel. ed. Syst. Nat.* i. 5, 2462, 217.

*Phalæna betularia*, *Wien. Verz.* 99, 2. *Fabr. Sp. Ins.* ii. 252, 56; *Mant. Ins.* ii. 194, 86; *Ent. Syst.* iii. 2, 158, 103.

*Geometra betularia*, *Bork. Eur. Schm.* v. 178, 72. *Esp. Schm.* v. 156, pl. 26, f. 1—9. *Hubn. Geom.* pl. 33, f. 173. *Haw. Lep. Brit.* 272.

*Geometra ulmaria*, *Bork. Eur. Schm.* v. 181, 73.

*Geometra marmoraria*, *Sepp, Ins.* ii. pl. 10, 11.

*Eubyja betularia*, *Hübner. Verz. Schm.* 318, 3073.

*Amphidasys betularia*, *Treit. Schm.* vi. 1, 230, 1. *Dup. Lep.* iv. 271, pl. 153, f. 1, 2. *Boisd. Ind.* 196, 1543. *Guen. Phal.* i. 209, 313.

*Biston betularia*, *Steph. Ill. Brit. Haust.* iii. 159. *Herr.-Sch. Eur. Schm.* iii. 102, 277.

a—m. England. From Mr. Stephens' collection.

n—v. England.

u—x. Europe. From M. Becker's collection.

y, z. Europe.

aa. France.

### North America.

#### 3. AMPHIDASYS QUERNARIA.

*Mas.*—*Ligno-fusca*; *alæ anticae maculis duabus apicalibus liturisque albis*; *posticae pallidiores, striga discali lituraque tremula nigris*. *Fœm.*—*Flavescente-alba, strigis spatiisque fuscis*; *thorax albus*; *abdomen fuscum, maculis dorsalibus albis*.

*Phalæna quernaria*, *Abbot, Ins. Georg.* ii. 205, pl. 103.

*Amphidasys quernaria*, *Guen. Phal.* i. 209, 310.

Georgia, Virginia.

#### 4. AMPHIDASYS COGNATARIA.

*Albida nigricante-cinereo confertissime punctata*; *alæ lineis deviiis angulosis nigris*. *A. betulariæ simillima*; *alæ anticae angustiores, margine exteriori magis obliquo*.

*Amphidasys cognataria*, *Guen. Phal.* i. 208, 312.

a. North America. From Mr. Milne's collection.

b. West Canada. From Mr. Bush's collection.

c. ——— ?

#### 5. AMPHIDASYS SPERATARIA.

*Mas.* *Cinerea, ochraceo aut olivaceo subtineta*; *antennæ late pectinatae*; *thorax fusco fasciatus*; *alæ nigro conspersæ, lineis duabus nigris obliquis angulosis subparallelis, fascia inferiore diffusa nigricante, lunulis marginalibus nigris*.

*Male.* Cinereous, with a slight ochraceous or olive tinge. Antennæ broadly pectinated to the tips. Thorax with a brown band in front. Wings thickly black-speckled, with two irregular oblique zigzag nearly parallel black lines, the first having along its inner side a diffuse blackish band; marginal lunules black. Fore

wings broader than those of *A. cognataria*, and with the exterior border less oblique. Length of the body 7 lines; of the wings 18 lines.

a. United States. Presented by E. Doubleday, Esq.

### South America.

#### 6. AMPHIDASYS CREBRARIA.

*Sordide albida; alæ ex parte ligno-fuscae, fusco confertim strigatae, linea media dentata nigro-fusca.*

*Amphidasys crebraria*, Guen. *Phal.* i. 216, 316, pl. 10, f. 3.

Rio Janeiro.

#### 7. AMPHIDASYS ARNOBIA.

*Alba, nigro subconspersa; alæ linea exteriori undulata valde angulata lineaque marginali nigris; antica linea angulata nigra, maculis costalibus fuscis; postica annulo informi discali nigro.*

*Phalæna-Geometra Arnobia*, Cram. *Pap. Exot.* iv. 188, pl. 383, f. 1.

*Amphidasys Arnobaria*, Guen. *Phal.* i. 211, 317.

Guiana. Brazil. Monte Video.

a. St. Domingo. From Mr. Tweedie's collection.

### Hindustan.

#### 8. AMPHIDASYS BENGALIARIA.

*Albido-ochracea, nigro subconspersa; antennæ maris breviter pectinatae; alæ lineis duabus obliquis angulatis remotis nigris; antica striga exteriori informi arcuata nigricante; postica macula discali fusca.*

*Amphidasys bengaliaria*, Guen. *Phal.* i. 210, 314.

a, b. Silhet. Presented by E. Doubleday, Esq.

c, d. Silhet. From Mr. Sowerby's collection.

### China.

#### 9. AMPHIDASYS? PANTERINARIA.

*Alba; thorax flavo signatus; abdomen cinereo maculatum, apice flavum; alæ cinereo maculatae, fascia submarginali macularum cinerarum ante quam series lunularum fuscarum flavo*



*annularum*; *antica macula mediana cinerea, puncto centrali obscuro, nec non macula basali flava strigisque duabus fuscis.*

*Amphidasis panterinaria*, *Bremer und Grey, Beitr. zur Schmett. Fauna des Nordlichen China's*, 21, 107.

North China.

### Genus 9. LOPHODES.

**Corpus robustum. Proboscis subobsoleta. Palpi porrecti, brevissimi, caput non superantes; articulus 3us minimus. Abdomen alas posticas non superans. Pedes glabri; tibiæ posticæ graciles, femoribus non longiores, calcaribus quatuor longis approximatis. Alæ elongatæ, lignicolores, lineis liturisque variis; anticæ apice rotundatæ, costa recta, margine exteriori perobliquo. Mas.—Antennæ plumosæ. Alæ subdenticulatæ. Fœm.—Antennæ simplices. Alæ dentatæ.**

*Lophodes*, *Guen. Phal. i. 211.*

**Body robust. Proboscis rudimentary. Palpi porrect, very short, not extending beyond the head; third joint extremely minute. Abdomen not extending beyond the hind wings. Legs smooth; hind tibiæ slender, not longer than the femora, with four long approximate spurs. Wings elongate, with various wood-coloured tints, and with numerous lines and streaks. Fore wings straight along the costa, rounded at the tips; exterior border very oblique. Male.—Antennæ plumose; branches very pubescent. Wings slightly denticulated. Female.—Antennæ simple, smooth. Wings strongly and irregularly dentated.**

This genus, and *Meticulodes* and *Ceratonyx*, should probably be removed from the *Amphidasys*.

#### 1. LOPHODES SINISTRARIA.

*Fusco-ochracea; alæ nigro conspersæ, lineis obliquis subundulatis aut angulosis nigris; antica macula costali subapicali alba. Mas.—Alæ nigro-cinereo suffusæ; antica puncto costali interiore alba. Fœm.—Alæ pallidiores, nonnunquam nigro-cinereo ex parte variæ; antica striga costa lata basali albida.*

*Lophodes sinistraria*, *Guen. Phal. i. 212, 318, pl. 10, f. 5.*

a, b. Australia. From Mr. Lambert's collection.

c. Australia. From Mr. Milne's collection.

d—h. Australia. From Mr. Damel's collection.

i. Australia. Presented by the late Earl of Derby.

*j, k.* Sydney. Presented by E. Doubleday, Esq.

*l.* Australia. From Mr. Stevens' collection.

*m—q.* Australia.

*r.* New South Wales. From Mr. Wood's collection.

### Fam. 5. BOARMIDÆ.

Corpus gracile. Frons non producta, nec fasciculata. Palpi squamosi, porrecti aut subascendentes, nonnunquam hirsuti, caput vix aut perpaullo superantes. Antennæ *maris* pectinatæ aut ciliatæ, *fœm.* filiformes aut deutatæ aut rarissime pectinatæ. Thorax oblongus. Abdomen *maris* longum, gracile. Pedes longiusculi; tibiæ posticæ sæpe incrassatæ et longissimæ. Alæ amplæ, cineræ, conspersæ, sæpissime dentatæ, non angulatæ, concolores, lituris non diversis; anticæ non acutæ nec falcatæ; posticæ rotundatæ.

Boarmidæ, *Guen. Phal.* i. 213.

Body slender. Front not prominent nor tufted. Palpi porrect or slightly ascending, squamous, occasionally hirsute, extending hardly or but little beyond the front. Antennæ almost always pectinated or strongly ciliated in the male, filiform or dentated or rarely pectinated in the female. Thorax somewhat oblong. Abdomen of the male long and slender. Legs rather long; hind tibiæ often incrassated and very long. Wings ample, alike in colour and with like markings, most often dentated, not angular, cinereous, speckled. Fore wings not acute nor falcate. Hind wings rounded.

#### A. Palpi non filiformes.

##### A. Tarsi non breves.

A. Antennæ *maris* ramis non spatulatis. Abdomen *fœmine* alas posticas non aut vix superans.

a. Palpi pilis non occulti.

i Palpi non rostriformes.

\* Frons non globosa.

† Tarsi non spinosi.

‡ Palpi non disjuncti.

§ Alæ basi non vesiculosæ.

→ Palpi non gracillimi.

++ Antennæ non incisæ.

∞ Palpi articulo 3o non filiformi.

+ Alæ non atræ.

0 Alæ non viridescentes.

|| Abdomen non cristatum.

## X Proboscis distincta.

= Tibiæ posticæ femoribus duplo longiores.

... Alæ amplissimæ.

— Alæ posticæ angulatæ.

1. AMBLYCHIA, *Guen.* x 3/4

— — Alæ posticæ non angulatæ.

2. CHORODNA, *Walk.* x 3/4

... .. Alæ mediocres.

19. CEROTRICHIA, *Guen.* o

== Tibiæ posticæ femoribus paullo longiores.

... Antennæ breviusculæ.

— Antennæ maris pubescentes, fœminæ simplices.

3. XYLOPTERYX, *Guen.* o

— — Antennæ maris pectinatæ, fœminæ crenulatæ.

24. STENOTRACHELYS, *Guen.* u

... .. Antennæ longiusculæ.

— Palpi articulo 2o securiformi.

4. HEMEROPHILA, *Steph.* x 3/4

— — Palpi articulo 3o non securiformi.

o Antennæ maris pectinatæ.

- Corpus gracile.

. Alæ elongatæ.

36. BOARMIA, *Treit.* x

.. Alæ non elongatæ.

34 18. BARGOSA, *Walk.* v

- - Corpus gracillimum.

14. TEPHROSIA, *Boisd.* x

o o Antennæ maris simplices.

- Alæ anticæ margine exteriori non flexo.

. Alæ non denticulatæ.

34. CERTIMA, *Walk.* o

.. Alæ denticulatæ.

36. GAZENA, *Walk.*

... Alæ anticæ margine exteriori flexo.

37. PSYRA, *Walk.* 3/4

## XX Proboscis subobsoleta.

= Palpi incumbentes.

5. NYCHIODES, *Guen.* o

== Palpi non incumbentes.

- ... Corpus robustum.  
 9. SYNOPSISIA, *Hbn.*  
 ... ... Corpus gracile.  
 40. MANONIDA, *Walk.*  
 XXX Proboscis obsoleta.  
 10. PHASILIA, *Guen.*  
 ||| Abdomen cristatum.  
 X Alæ valde dentatæ.  
 8. GASTRINA, *Guen.*  
 XX Alæ vix dentatæ.  
 = Corpus crassum.  
 19. PACHYODES, *Gn.*  
 == Corpus non cras-  
 sum.  
 38. RHUMA, *Walk.*  
 00 Alæ viridescences.  
 20. OPHTHALMODES, *Gn.*  
 ++ Alæ atræ.  
 6. MELANODES, *Guen.*  
~~non~~ Palpi articulo 3o filiformi.  
 + Alæ mediocres.  
 7. SMYRIODES, *Guen.*  
 ++ Alæ amplæ.  
 0 Palporum articulus 3us  
 brevis.  
 17. HYPOCHROMA, *Gn.*  
 00 Palporum articulus 3us  
 2o non aut vix brevior.  
 18. AGATHIA, *Walk.*  
 ++++ Antennæ incisæ.  
 11. CALAMODES, *Guen.*  
 +- Palpi gracillimi. 12. CLEORA, *Curt.*  
 §§ Alæ anticæ basi vesiculosæ.  
 + Pedes breves. 15. PARAPHIA, *Guen.*  
 +- Pedes non breves. 39. GAMBIA, *Walk.*  
 †† Palpi disjuncti.  
 § Corpus robustum. 16. BRYOPTERA, *Guen.*  
 §§ Corpus gracile. - 26. GNOPHOS, *Treit.*  
 †† Tarsi spinosi.  
 † Alæ amplissimæ. - - 22. ELPHOS, *Guen.*  
 †† Alæ mediocres. - - 27. DASYDIA, *Guen.*  
 \*\* Frons globosa. - - 28. BRONCHELIA, *Guen.*  
 ii. Palpi subrostriformes. 1  
 \* Pedes robusti. - - 25. XEBODES, *Guen.*

- \*\* Pedes graciles. - 30. DICHROMODES, *Guen.*  
 b. Palpi pilis occulti.  
   i. Caput pilosissimum. - - 28. Psodos, *Treit.*  
   ii. Caput non pilosissimum. - 29. TORULA, *Hubn.*  
 B. Antennæ maris ramis spatulatis. Abdomen fœmine alas sat  
   superans. - - - - 31. PYGMÆNA, *Boisd.*  
 B. Tarsi breves. - - - - 32. EXILIS, *Guen.*  
 B. Palpi filiformes. - - - - 33. MNIOPHILA, *Boisd.*

## Genus 1. AMBLYCHIA.

Corpus robustum. Proboscis sat crassa. Palpi lati, compressi, pilosi, oblique ascendentes, frontem superantes; articulus 3us minimus. Thorax brevis. Tibiæ posticæ incrassatæ femoribus duplo longiores, calcaribus quatuor longis. Alæ amplissimæ; anticæ falcatae, costa et margine exteriore convexis; posticæ latissimæ, abdomen longe superantes, margine exteriore flexo antice dentato. *Mas.*—Antennæ plumosæ, apice simplices.

*Amblychia*, *Guen. Phal.* i. 214.

Body stout. Proboscis robust. Palpi broad, compressed, pilose, obliquely ascending, extending beyond the front; third joint extremely minute. Thorax short. Abdomen smooth. Hind tibiæ incrassated, twice the length of the femora; spurs four, long, remote. Wings very ample. Fore wings falcate; costa and exterior border convex. Hind wings very broad, extending far beyond the abdomen; exterior border quadrate, its fore part with very large teeth. *Male.*—Antennæ with very long pubescent branches; apical fourth part simple. *Female.*—Antennæ simple, smooth.

## 1. AMBLYCHIA ANGERONARIA.

*Fusca* (mas) aut *ochracea* (fœm); alæ lineis tribus saturatioribus, linea 2a e lunulis albo plus minusve marginatis; anticæ linea interiore lunulata albo plus minusve marginata. *Mas.*—Alæ ochraceæ plus minusve variæ. *Fœm.*—Alæ anticæ plaga apicali alba.

*Var.* *Mas.* Alæ cinereo-cervinæ.

*Amblychia Angeronaria*, *Guen. Phal.* i. 215, 319, pl. 4, f. 9.

a. Ceylon. Presented by R. Templeton, Esq.

b-e. Hindostan. From the collection of the Entomological Society.

f. Silhet. Presented by E. Doubleday, Esq.

g. Silhet. From Mr. Argent's collection:

k. Sumatra? From Sir Stamford Raffles' collection.  
i, j. North Hindostan. From Mr. James' collection.

## Genus 2. CHORODNA.

*Mas.* Corpus robustum. Proboscis valida. Palpi breves, lati oblique ascendentes, caput non superantes; articulus 3us minimus. Antennæ longiusculæ, pectinatæ, apices versus nudæ. Thorax tegulæ longiusculæ. Abdomen subcylindricum, subtus valde lanuginosum. Tibiæ posticæ valde tumidæ. Alæ amplæ; antice elongatæ, vix falcatæ, margine exteriori sat obliquo antice convexo postice recto; posticæ vix dentatæ.

*Male.* Body robust. Proboscis stout, moderately long. Palpi short, broad, obliquely ascending, not rising as high as the front third joint very minute. Antennæ rather long, pectinated, except towards the tips; branches rather long, very thickly set. Thorax with rather long tegulæ. Abdomen nearly cylindrical, very lanuginous beneath, as is also the pectus. Hind tibiæ much inflated. Wings ample. Fore wings elongated, hardly falcate; exterior border rather oblique, convex in front, straight hindward. Hind wing hardly scalloped.

### 1. CHORODNA EREBUSARIA.

*Mas.* Cervina; thorax antice fusco bilineatus; abdomen basi albidum; alæ albidæ, fusco aut nigro conspersæ, spatio marginali ex parte fuscescente; antice vitta costali basali late oblongo-quadrata fusca, litura exteriori magna obliqua lunulata rufescente-fusca nigricante marginata, striga posteriori obliqua flexa alba fusco marginata, macula exteriori cinerea; posticæ macula magna discali lunulisque duabus marginalibus nigricante-fuscis.

*Male.* Fawn-colour. Thorax with two transverse brown lines in front. Abdomen paler than the thorax, whitish towards the base. Wings whitish, minutely brown- or black-speckled; the marginal space partly and irregularly tinged with brown. Fore wings with an oblong-quadrate broad brown stripe, occupying the whole base of the wings, and extending along the costa to full one-third of the length; a large reddish brown blackish-bordered oblique lunulate mark at a little beyond the end of the stripe, and having behind it an oblique bent white brown-bordered streak, which widens as it approaches the interior border; a cinereous spot on the outer side of the streak. Hind wings with a large blackish brown discal spot;

exterior border with two elongated blackish brown lunules. Length of the body 13 lines; of the wings 34 lines.

a. North Hindostan. From Dr. Hooker's collection.

### Genus 3. XYLOPTERYX.

**Corpus gracile. Proboscis mediocris. Palpi lati, compressi, ascendentes, frontem paullo superantes; articulus 3us minimus. Antennæ maris pubescentes, scem. glabræ. Thorax oblongus. Abdomen maris alas posticas superans, scem. brevius. Tibiæ posticæ incrassatæ, calcaribus quatuor longis. Alæ latiusculæ, subdentatæ; anticæ costa convexa, margine exteriori convexo.**

**Xylopteryx, Guen. Phal. i. 215.**

Body slender. Proboscis moderately long. Palpi ascending, broad, compressed, extending a little beyond the front; third joint extremely minute. Antennæ pubescent in the male, smooth in the female. Thorax oblong. Abdomen of the male extending a little beyond the hind wings, that of the female much shorter. Hind tibiæ incrassated in the male, with four long spurs. Wings rather broad, slightly dentate. Fore wings rectangular at the tips; costa very slightly convex; exterior border convex.

#### 1. XYLOPTERYX PROTEARIA.

*Cervina; alæ ochraceo plus minusve variæ, fusco confertissime strigatæ, lineis duabus undulatis nigricantibus, lunulis aut punctis marginalibus nigris.*

**Xylopteryx Protearia, Guen. Phal. i. 215, 320, pl. 4, f. 8.**

a, b. South Africa. Presented by Sir A. Smith.

### Genus 4. HEMEROPHILA.

**Corpus gracile. Proboscis distincta. Palpi graciles, compressi, erecti, caput vix superantes; articulus 3us minimus. Pedes graciles; tibiæ posticæ incrassatæ, quadricaratae. Alæ oblongæ, dentatæ, concolores, linea obliqua obscura; anticæ acutæ, margine exteriori convexo sat obliquo; posticæ caput superantes, dentibus acutis. Mas.—Antennæ pectinatæ, apice nudæ. Abdominis latera postice subfasciculata.**

**Hemerophila, Steph. Ill. Brit. Haust. iii. 189. Lederer, Guen. Phal. i. 216.**

**Synopsis, p., Hübn. Verz. Schm. 317.**

*Acidalia*, p., *Treit.*

*Boarmia*, *Dup.*; *Boisd.*; *Herr.-Sch.*

Body slender, Proboscis distinct. Palpi slender, compressed, vertical, hardly rising above the head; third joint extremely minute. Legs slender, moderately long; hind tibiæ incrassated, with four moderately long spurs. Wings oblong, dentate, alike in colour, with an oblique dark line. Fore wings acute; exterior border convex, rather oblique. Hind wings extending beyond the abdomen, with acute teeth. *Male*.—Antennæ moderately pectinated, bare towards the tips. Abdomen longer than that of the female, slightly tufted along each side hindward. *Female*.—Antennæ smooth. Type *H. abruptaria*.

## Europe.

### 1. HEMEROPHILA ABRUPTARIA.

*Pallide lignicolor; alæ linea undulata nigricante, fascia informi obliqua strigisque plurimis fuscis, gutta subtus discali nigricante; anticæ linea interiore obliqua nigricante.*

*Geometra abruptaria*, *Thunb. Ins. Suec.* 59, pl. 4.

*Phalæna suberaria*, *Donov. Brit. Ins.* vii. 91, pl. 251.

*Geometra petrificaria*, *Hubn. Geom.* pl. 52, f. 267.

*Synopsia petrificaria*, *Hubn. Verz. Schm.* 317, 3066.

*Acidalia petrificata*, *Treit. Schm.* vi. 2, 65, 46.

*Boarmia petrificata*, *Dup. Lep.* iv. 375, pl. 161, f. 3. *Boisd. Ind.* 198, 1567. *Herr.-Sch. Eur. Schm.* iii. 77, 197.

*Hemerophila abruptaria*, *Steph. Brit. Haust.* iii. 189. *Guen. Phal.* i. 218, 324.

*a—r.* England. From Mr. Stephens' collection.

*s—w.* England.

### 2. HEMEROPHILA NYCTEMERARIA.

*Pallide lignicolor; thorax fusco bifasciatus; alæ cervino variae, fusco strigatæ; anticæ lineis duabus obliquis nigris, 2a costam versus valde flexa; posticæ linea una nigra.*

*Geometra nyctemaria*, *Hubn. Geom.* f. 564—566.

*Boarmia nyctemaria*, *Dup. Lep.* v. 551, pl. 210, f. 2. *Frey. Schm.* i. pl. 78, f. 1. *Boisd. Ind.* 197, 1566. *Herr.-Sch. Eur. Schm.* iii. 77, 198.

*Hemerophila nyctemeraria*, *Guen. Phal.* i. 219, 325.

*a.* Europe. From M. Becker's collection.



## 3. HEMEROPHILA SOLIERARIA.

*Albido subcinerea; prothorax fuscus; alæ lineis fuscis transversis, striga nigra sinuata; antica striga ad apicem interrupta.*

*Boarmia Solieraria*, Ramb. Ann. Soc. Ent. Fr. iii. 390, pl. 8, f. 5.

*Boisd. Ind.* 197, 1362. *Dup. Lep. Suppl.* iv. 369, pl. 80, f. 2.

*Hemerophila Solieraria*, Guen. *Phal.* i. 219, 327.

Marseilles.

## North America.

## 4. HEMEROPHILA UNITARIA.

*Rufescente-cinerea; alæ lineis obliquis subundulatis fasciæque incompleta submarginali nigris, margine exteriori pallido dentato; antica lituris costalibus nigris.*

*Boarmia unitaria*, Herr.-Sch. *Lep. Exot.* f. 204.

*Hemerophila unitaria*, Guen. *Phal.* i. 219, 326.

Tennessee.

## Siberia.

## 5. HEMEROPHILA STRICTARIA.

*Cinerea; antennæ maris usque ad apices pectinatæ; alæ anticae integræ, lineis duabus obliquis rectis parallelis nigris, 1a costam non attingente, 2a subangulata, spatio intermedio pallido umbram includente, linea submarginali pallida, puncto discali nigro; posticae dentatæ, linea recta nigra.*

*Hemerophila strictaria*, Lederer, *Lep. Sib.* 28, pl. 6, f. 2. Guen. *Phal.* i. 219, 328.

Siberia.

## South Africa.

## 6. HEMEROPHILA? MINUATA.

*Fœm. Pallide testacea; caput et thorax anticus fusca; palpi obscure fusci, caput sat superantes; antennæ robustæ; tibiæ posticæ vix incrassatæ; alæ longæ, angustæ, lineis plurimis fuscis perobliquis, fascia lata ferruginea, linea submarginali albida, linea marginali fusca, albido marginata; anticae acutæ, apud costam fusca, puncto discali nigro, margine exteriori vix dentato; posticae subdentatæ.*

*Female.* Pale testaceous, slender. Head and fore part of the thorax brown. Palpi dark brown, extending somewhat beyond the

head. Antennæ stout. Hind tibiæ hardly incrassated. Wings long, narrow, with several very oblique brown lines, which in the fore wings are mostly included in a broad very oblique ferruginous band; submarginal line whitish; marginal line brown, whitish bordered. Fore wings acute, brownish along the costa; discal point black; exterior border hardly dentate. Hind wings with the exterior border slightly dentate. Length of the body  $3\frac{1}{2}$ —4 lines; of the wings 13—14 lines.

a, b. South Africa. Presented by Sir A. Smith.

c. Port Natal. From M. Guenzius' collection.

### Hindustan.

#### A. Statura maxima.

##### A. Alæ nigro non variæ.

α. Alæ lineæ nulla nigra. - - - - - creataria, *Guen.*

β. Alæ lineæ nigra. - - - - - strixaria, *Guen.*

B. Alæ nigro variæ. - - - - - mauraria, *Guen.*

#### B. Statura mediocris.

A. Alæ posticæ dentatæ. - - - - - subplagiata, *Walk.*

##### B. Alæ posticæ non dentatæ.

α. Alæ posticæ peracutæ. - - - - - Vidhisara, *Walk.*

##### β. Alæ posticæ non acutæ.

a. Alæ posticæ angulatæ. - - - - - exclusa, *Walk.*

b. Alæ posticæ vix angulatæ. - - - - - prætereuns, *Walk.*

### 7. HEMEROPHILA CREATARIA.

*Cervina*; alæ lineolis transversis fuscis confertissime strigatæ, lineæ submarginali incompleta fusca pallido marginata, fascia subtus latissima fusca, plagis marginalibus albidis.

*Hemerophila creataria*, *Guen. Phal.* i. 217, 321.

a, b. Silhet. Presented by E. Doubleday, Esq.

c. Silhet. From Mr. Stainforth's collection.

### 8. HEMEROPHILA STRIXARIA.

*Cervina*; alæ lineolis transversis fuscis conferte strigatæ, gutta discali lineaque exteriori obliqua angulosa fuscis, fascia subtus lata pallide fusca, margine subtus pallido.

*Hemerophila strixaria*, *Guen. Phal.* i. 217, 312.

a, b. Silhet. From Mr. Sowerby's collection.

- e, d. Silhet. From Mr. Stainforth's collection.  
 e. Silhet. From Mr. Argent's collection.  
 f. Hindostan. From Archdeacon Clerk's collection.

## 9. HEMEROPHILA MAURARIA.

*Fusca; alæ lineolis transversis nigris confertissime strigatæ, fasciis macularibus nigris, linea submarginali pallida, fascia subtus marginali interrupta alba.*

*Hemerophila mauraria*, Guen. *Phal.* i. 218, 323.

- a. Silhet. Presented by E. Doubleday, Esq.

## 10. HEMEROPHILA SUBPLAGIATA.

*Fœm. Pallide ochracea; tibiæ posticæ incrassatæ; alæ strigis plurimis transversis ligni-coloribus, linea exteriori fusca undulata valde obliqua, puncto discali punctisque marginalibus nigricantibus, plagis quatuor marginalibus albidis.*

*Female.* Pale ochraceous. Hind tibiæ moderately incrassated. Wings with numerous transverse wood-coloured streaks, which are here and there confluent; an exterior undulating very oblique brown line; discal point and marginal points blackish; a whitish patch on the hind part of the exterior border, accompanied by a cinereous patch. Length of the body 5 lines; of the wings 16 lines.

- a. Himalaya Mountains. Presented by the Entomological Club.

## 11. HEMEROPHILA VIDHISARA.

*Fœm. Pallide ochracea; tibiæ posticæ vix incrassatæ; alæ nigro subconsersæ, lineis fuscis obliquis valde indistinctis pallido marginatis, puncto discali punctisque submarginalibus fuscis; anticæ vix acutæ; posticæ valde acutæ, margine exteriori truncato.*

*Female.* Pale ochraceous, more whitish beneath. Hind tibiæ hardly incrassated. Wings very minutely speckled with black, with three or four oblique very indistinct brown lines; these are more or less zigzag and pale-bordered; discal point and submarginal points brown. Fore wings hardly acute. Hind wings very acute; exterior border straight, somewhat truncated. Length of the body 4 lines; of the wings 14 lines.

- a. Ceylon. Presented by R. Templeton, Esq.  
 b. Ceylon. From Mr. Stevens' collection.

## 12. HEMEROPHILA? EXCLUSA.

**Mas.** *Testaceo-albida, gracilis, subtus flavescens; palpi caput sat superantes, articulo 3o longi-conico; antennæ subpectinatae; tibiæ posticæ incrassatae; alæ cervino subconspersæ, fasciis duabus exterioribus cervinis; anticæ acutæ, costa fusco notata, fascia interiore fusco punctata, margine exteriori recto; posticæ lineis duabus fuscis, margine exteriori flexo.*

**Male.** Testaceous whitish, slender, yellowish testaceous beneath. Palpi extending somewhat beyond the head; third joint elongate-conical. Antennæ very minutely pectinated. Hind tibiæ incrassated. Wings minutely speckled with fawn-colour, adorned with two exterior fawn-coloured bands. Fore wings acute; costa brown-marked; interior band accompanied by brown dots; exterior border straight. Hind wings with two brown lines; the exterior one forming darker brown dots; exterior border bent. Length of the body 6 lines; of the wings 16 lines.

**a, b** Hindostan. From Archdeacon Clerk's collection.

## 13. HEMEROPHILA? PRÆTEREUNS.

**Fœm.** *Albido-testacea; alæ fusco subconspersæ, linea nigricante subrecta, spatio exteriori purpurascence-cinereo, linea interiore incompleta minus conspicua; anticæ acutæ, lituris obliquis lunulaque subapicali costalibus fuscis; posticæ margine exteriori vix flexo.*

**Female.** Whitish testaceous, in structure like the preceding species. Antennæ simple. Wings minutely brown-speckled, with a nearly straight blackish line, which extends from near the tips of the fore wings to a little beyond half the length of the interior border of the hind wings; space beyond the line mostly purplish cinereous; an interior incomplete and less distinct line. Fore wings acute; costa with oblique brown marks, and with a submarginal brown lunule. Hind wings with the exterior border hardly bent. Length of the body 7 lines; of the wings 17 lines.

**a.** Ceylon. From Mr. Stevens' collection.

## Australia.

**A.** Abdomen basi nigro-fuscum. - - - luxaria, Guen.

**B.** Abdomen basi non nigro-fuscum.

**A.** Caput nigro fasciatum.

- A. Caput albo non fasciatum. - - hemipteraria, Guen.  
 B. Caput albo fasciatum. - - - silicaria, Guen.  
 B. Caput nigro non fasciatum.  
 A. Alæ anticæ puncto discali nigro. - - mundifera, Walk.  
 B. Alæ anticæ puncto nullo discali. - - vestita, Walk.

## 14. HEMEROPHILA LUXARIA.

**Mas.** *Pallide testaceo-cinerea; abdomen alas posticas superans, basi nigro-fuscum, incisuris pallidioribus; alæ anticæ subdentatæ, linea nigra obliqua subsinuata fusco marginata, linea submarginali fulgurata viæ conspicua, puncto discali; posticæ lineis tribus nigris parallelis, 1a 2aque fuscescente marginatis.*

*Hemerophila luxaria*, Guen. *Phal.* i. 220, 329.

Eastern Australia.

## 15. HEMEROPHILA HEMIPTERARIA.

*Pallide subcervino-cinerea; thorax nigro fasciatus; alæ nigro punctatæ, linea subundulata nigra pallido marginata, linea exteriori undulata albida nigricante marginata, linea interiori minus determinata; anticæ striga basali nigra, linea nigra costam versus valde flexa.*

*Hemerophila hemipteraria*, Guen. *Phal.* i. 220, 330, pl. 6, f. 2.

a, b. Australia. Presented by the Entomological Club.

c. Australia. From Mr. Damel's collection.

d, e. Sydney. From Mr. Lambert's collection.

f, g. Sydney. From Mr. Diggles' collection.

h. Australia.

i. Tasmania. Presented by M. Allport, Esq.

## 16. HEMEROPHILA SILICARIA.

**Var. ?** *Fœm. Purpurascente-cinerea; frons atra, albo fasciata; thorax nigro fasciatus; abdomen annulis anticis nigris; tibiæ posticæ incrassatæ; alæ lineis duabus nigris obliquis subundulatis albido marginatis, punctis marginalibus nigris elongatis; anticæ strigis duabus basalibus nigris.*

*Hemerophila silicaria*, Guen. *Phal.* i. 220, 331.

**Var. ?** *Female.* Purplish cinereous. Front deep black, with a white band. Thorax with a black band in front. Fore part of the abdomen with black rings; under side white. Hind tibiæ

incrassated. Wings with two black oblique whitish-bordered slightly undulating lines, which are accompanied by ferruginous bands; marginal points black, elongated. Fore wings with two black streaks; one basal, near the costa; the other proceeding from near the base of the interior border. Hind wings beneath with a brown subapical patch. Length of the body  $5\frac{1}{2}$  lines; of the wings 16 lines.

a. Sydney. From Mr. Lambert's collection.

#### 16. HEMEROPHILA MUNDIFERA.

Mas et fœm. *Albida; thorax fusco bifasciatus; abdomen strigis transversis fuscis; alæ fusco subconspersæ, lineis duabus nigricantibus obliquis subundulatis, fasciis indeterminatis ferrugineis, 2a lineam albidam undulatam includente, punctis marginalibus nigris; anticæ puncto discali nigro.*

*Male and female.* Whitish. Thorax with two brown bands. Abdomen with transverse brown marks. Wings minutely brown-speckled, with two blackish oblique slightly undulating lines, which are accompanied by irregular incomplete ferruginous bands, of which the exterior one includes a whitish undulating line; marginal points black; under side with a broad brown submarginal band. Fore wings with a black discal point. Length of the body  $5\frac{1}{2}$ —6 lines; of the wings 14—15 lines.

a, b. Sydney. From Mr. Diggles' collection.

#### 17. HEMEROPHILA VESTITA.

Mas. *Fuscescente-cinerea, nigro conspersa; thorax nigro fasciatus; tibiæ posticæ subincrassatæ; alæ fascia nigra perobliqua, fascia exteriorè diffusa valde interrupta, punctis discalibus nigris; anticæ striga basali liturisque costalibus nigris.*

*Male.* Brownish cinereous, black-speckled. Antennæ moderately pectinated. Thorax with a black band. Tarsi brown, with pale bands; hind tibiæ slightly incrassated. Wings with a very oblique black band, beyond which there is another diffuse and much interrupted black band; discal points black; under side with a black discal dot. Fore wings with a black basal streak and with black costal marks. Length of the body 5 lines; of the wings 14 lines.

a. Tasmania. Presented by Morton Allport, Esq.

## Genus 5. NYCHIODES.

Corpus robustum. Proboscis subobsoleta. Palpi porrecti, pilosi, caput paullo superantes; articulus 3us minimus. Abdomen alas posticas non superans. Pedes robusti; tibiæ posticæ non incrassatæ, calcaribus sat longis; tarsi crassi. Alæ amplæ, spissæ, dentatæ, fimbria longa densa; anticæ apice rectangulatæ, margine exteriore convexo. *Mas.*—Antennæ usque ad apices latissime pectinatæ. *Fœm.*—Antennæ simplices.

*Boarmia*, p., *Treit.*; *Dup.*; *Boisd.*; *Herr.-Sch.*

*Nychiodes*, *Lederer*, *Schm.* 56. *Guen. Phal.* i. 221.

Body stout. Proboscis rudimentary. Palpi porrect, extending a little beyond the head, pilose to the tips; third joint very minute. Abdomen not extending beyond the hind wings. Legs stout; hind tibiæ not incrassated, with moderately long spurs; tarsi thick. Wings ample, stout, regularly dentate; fringe long, thick. Fore wings rectangular at the tips; exterior border convex. *Male.*—Antennæ very broadly pectinated to the tips. *Female.*—Antennæ simple.

## 1. NYCHIODES LIVIDARIA.

*Obscure cinerea, vix ferruginosa, nigro conspersa; abdomen nigro cinctum; alæ lineæ undulata obliqua lunulisque marginalibus nigris, fascia exteriore vaga incompleta albida; anticæ lineæ interiore arcuata nigra.*

*Geometra lividaria*, *Hubn. Geom.* pl. 26, f. 141.

*Boarmia lividaria*, *Treit. Schm.* vi. 1, 207, 8. *Dup. Lep. Sup.* iv. 56, pl. 55, f. 1. *Boisd. Ind.* 197, 1565. *Herr.-Sch. Eur. Schm.* iii. 82, 218, f. 37.

*Nychiodes lividaria*, *Lederer, Guen. Phal.* i. 221, 332.

s—d. Europe. From M. Becker's collection.

## Genus 6. MELANODES.

Corpus robustum. Caput parvum, retractum. Proboscis brevis, valida. Palpi porrecti, breves; articulus 2us latus; 3us minimus. Antennæ maris crenulatæ, fœminæ simplices. Pedes læves; tibiæ posticæ non incrassatæ, calcaribus longis. Alæ amplæ, nigre, dentatæ; anticæ vix acutæ, lineis fasciisque atris.

*Melanodes*, *Guen. Phal.* i. 222.

Body robust. Head small, retracted. Proboscis short, stout. Palpi short, porrect, extending very little beyond the head; second

joint broad ; third joint very minute. Antennæ of the male crenulated, of the female smooth. Legs smooth ; hind tibiæ not incrassated ; spurs long. Wings ample, black, regularly dentate. Fore wings hardly acute, with deep black lines and bands ; exterior border moderately oblique.

### 1. MELANODES ANTHRACITARIA.

*Nigra ; alæ venis albido subnotatis ; anticæ lineis duabus atris, 1a angulosa, 2a sinuata, puncto costali flavescente, umbra intermedia nigra flexa ; posticæ umbra integra, linea interiore obsoleta.*

*Melanodes anthracitaria*, Guen. *Phal.* i. 222, 333, pl. 9, f. 7.

Australia.

### 2. MELANODES ? ATRIPLENA.

*Fœm. Nigra, sat gracilis, subtus obscure cinerea ; pedes graciles ; alæ anticæ lineis plurimis undulatis, nonnullis latioribus conspicuis, lunula discali lunulisque marginalibus atris ; posticæ nigricante-cinereæ, lineis obscurioribus indistinctis.*

*Female.* Black, dark cinereous beneath, except towards the exterior border of the wings. Body hardly stout. Legs slender. Fore wings with numerous undulating deep black lines, three or four of which are broader and more conspicuous than the others ; marginal lunules deep black, elongated ; discal lunule deep black. Hind wings blackish cinereous, with indistinct darker lines. Length of the body  $4\frac{1}{2}$ — $5\frac{1}{2}$  lines ; of the wings 12—14 lines.

*a, b.* Tasmania. Presented by Morton Allport, Esq.

*c.* Tasmania. Presented by the Rev. Augustus Beaufort.

## Genus 7. SMYRIODES.

*Mas.* Corpus sat validum. Proboscis robusta. Palpi lati, compressi, squamoso-hirsuti, frontem superantes ; articulus 3us filiformis, bene determinatus. Antennæ pectinatæ. Thorax brevis, latus, convexus. Abdominis fasciculus apicalis elongatus. Pedes breves, glabri ; tibiæ posticæ non dilatatæ. Alæ integræ, robustæ, sat latæ ; anticæ acutæ, lineis bene determinatis, margine exteriori subobliquo ; posticæ vix lineatæ.

*Smyriodes*, Guen. *Phal.* i. 223.

*Male.* Body rather stout. Proboscis robust. Palpi broad, compressed, squamous-hirsute, extending beyond the front ; third



joint filiform, distinct. Antennæ pectinated to the tips; branches robust, regular, moderately long. Thorax short, broad, convex. Pectus villose. Abdomen with a long apical tuft. Legs short, smooth; hind tibiæ not dilated. Wings entire, stout, rather broad. Fore wings acute, with distinct lines; exterior border slightly convex and oblique. Hind wings not like the fore wings in colour and markings.

#### 1. SMYRIODES APLECTARIA.

*Mas.* *Glaucocinerea*; abdomen *albidum*, *nigro fasciatum*; alæ *anticæ nigro conspersæ, cervino variæ, lineis interiore et exteriori nigris sinuatis subparallelis apud costam dilatatis, linea submarginali albida indistincta maculari, fimbria nigro notata*; *posticæ sordide cinerascens, linea margineque exteriori nigricantibus.*

*Smyriodes aplectaria*, *Guen. Phal. i. 223, 334, pl. 20, f. 1.*

*Tasmania.*

#### Genus 8. GASTRINA.

*Corpus robustum. Proboscis distincta. Palpi compressi, squamosi, frontem paullo superantes; articulus 3us brevissimus, indistinctus. Thorax latus, quadratus. Abdomen crassum, cristatum. Pedes breves, subæquales, subpilosi; tibiæ posticæ breves, incrassatæ. Alæ robustæ, dentatæ, sat latæ, lituris variis; anticæ subacutæ, margine exteriori subobliquo. Mas.—Antennæ pectinatæ. Fem.—Antennæ filiformes, subtus pubescentes.*

*Gastrina*, *Guen. Phal. i. 224.*

Body stout. Proboscis distinct. Palpi compressed, squamous, extending a little beyond the front; third joint indistinct and very short. Thorax broad, quadrate, with two convex lobes in front; lappets short, far apart. Abdomen thick, crested along nearly the whole length. Legs short, slightly pilose, nearly equal; hind tibiæ short, incrassated. Wings robust, dentate, rather broad, with various colours. Fore wings slightly acute; exterior border slightly oblique. *Male.*—Antennæ pectinated; branches regular. *Female.*—Antennæ filiform, pubescent beneath.

#### 1. GASTRINA ORISTARIA.

*Cinerascens*; corpus *nigro fasciatum*; alæ *nigro et rufescente strigatæ*; *anticæ lineis interiore et exteriori nigris distinctis, hac flexa, spatio intermedio saturatiore*; *posticæ pallidiores, basi non strigatæ.*

*Gastrina cristaria*, *Guen Phal.* i. 224, 335, pl. 5, f. 4.

Australia.

## 2. GASTRINA? EREBINA.

*Mas et scem.* *Albido-cinerea*; *caput fusco bifasciatum*; *palpi pilosi, caput superantes, articulo 3o conico distincto*; *antennæ maris pectinatæ, apice serratæ*; *thorax fusco fasciatus, postice ferrugineus*; *abdomen non cristatum*; *alæ lineis duabus nigris undulatis remotis subparallelis ferrugineo marginatis.*

*Male and female.* Whitish cinereous, white beneath. Head with two brown bands. Palpi pilose, extending beyond the front; third joint conical, distinct. Antennæ of the male moderately pectinated, minutely serrated towards the tips. Thorax with a brown band in front; hind part ferruginous. Abdomen not crested, with two brown bands at the base, and in the male with lateral tufts towards the tip. Hind tibiæ incrassated, with moderately long spurs. Wings thinly black-speckled, distinctly denticulated; interior and exterior lines black, undulating, far apart, nearly parallel to each other, diffusedly and irregularly ferruginous-bordered; a distinct black discal lunule; under side with a very broad black submarginal band. Length of the body 7—8 lines; of the wings 18—20 lines.

*a, b.* Tasmania. Presented by M. Allport, Esq.

## Genus 9. SYNOPSISIA.

*Corpus robustum. Caput parvum. Proboscis subobsoleta. Palpi graciles, breves, disjuncti, frontem non superantes; articulus 3us minimus. Antennæ maris pectinatæ. Thorax latus, quadratus, fasciculatus. Abdomen maris conicum, scem. latum subovatum. Pedes breviusculi, subpilosi; tibiæ posticæ non dilatatæ. Alæ amplæ, nebulosæ, denticulatæ; anticæ apice subrotundatæ, margine exteriori sat obliquo.*

*Synopsisia*, *Hübner Verz. Schm.* 317; *Lederer*; *Guen. Phal.* i. 225. *Boarmia*, p. *Treit.*; *Dup.*; *Frey.*; *Boisd.*; *Herr.-Sch.*

Body stout. Head small. Proboscis rudimentary. Palpi slender, short, remote, not extending beyond the front; third joint very minute. Antennæ rather broadly pectinated in the male, simple in the female. Thorax broad, quadrate, with a dorsal tuft. Abdomen conical in the male, broad and subovate in the female.

Legs rather short, slightly pilose; hind tibiæ not dilated, with moderately long spurs. Wings ample, clouded, denticulate. Fore wings somewhat rounded at the tips; exterior border slightly convex and moderately oblique. Hind wings more dentate than the fore wings.

### Europe. Siberia.

#### 1. SYNOPSISIA BITUMINARIA.

*Fuliginoso-nigricans; abdomen punctis dorsalibus nigris bivittatum, fascia basali pallida; alæ lituris fere occultis, lineis interiore et exteriori infuscatis subparallelis.*

*Synopsisia bituminaria*, Lederer, *Lepid. Sibir.* 28, pl. 6, f. 1. Guen. *Phal.* i. 226, 337.

Altai.

#### 2. SYNOPSISIA AMYGDALARIA.

*Albido-cinereascens; alæ subdentatæ, ex parte nigricante-cinereo nebulosæ, lineis duabus subundulatis nigricantibus; antica lituris costalibus nigris, linea exteriori subduplicata angulo acuto.*

*Boarmia amygdalaria*, Herr.-Sch. *Eur. Schm.* iii. 82, 217, pl. 70, f. 432.

*Synopsisia amygdalaria*, Guen. *Phal.* i. 226, 338.

Isle of Crete.

#### 3. SYNOPSISIA SOCIARIA.

*Cinerea, nigro conspersa; alæ lunulis marginalibus nigris; antica lineis interiore et exteriori undulatis denticulatis, hac costam versus flexa; posticæ linea interiore obsoleta.*

*Geometra sociaria*, Hübn. *Geom.* pl. 29, f. 155; pl. 82, 424.

*Synopsisia sociaria*, Hübn. *Verz. Schm.* 317, 3065. Guen. *Phal.* i. 227, 340.

*Boarmia sociaria*, Treit. *Schm.* vi. 1, 215, 11. Dup. *Lep.* iv. 332, pl. 157, f. 1; pl. 159, f. 6. Frey. *Neu. Beitr.* iv. pl. 348. Boisd. *Ind.* 197, 1563. Herr.-Sch. *Eur. Schm.* iii. 78, 199.

a, b. Europe. From M. Becker's collection.

## 4. SYNOPSIS LURIDARIA.

*Cinerea ; alæ conspersæ, nebulosæ, lineis duabus undulatis nigris albo marginatis ; anticæ fascia brevi antica submarginali fusca albo marginata.*

*Boarmia luridaria, Frey. Beitr. v. 154, pl. 474, f. 4. Herr.-Sch. Eur. Schm. Sup. 73, f. 509, 510.*

*Synopsis luridaria, Guen. Phal. i. 227, 341.*

*Sarepta. Altai.*

## 5. SYNOPSIS PROPINQUARIA.

*Pallide testacea ; alæ vix conspersæ ; anticæ lineis duabus remotis bene determinatis, la quadridentata, umbra media nulla, puncto discali minimo.*

*Boarmia propinquaria, Boisd. Ind. 197, 1564.*

*Synopsis propinquaria, Guen. Phal. i. 227, 342.*

*South France.*

## North America.

## 6. SYNOPSIS PHIGALEARIA.

*Cervina ; alæ conspersæ, fascia marginali cinerea ; anticæ maculis costalibus albis, linea nigra angulosa, spatio interiore olivaceo-cinereo ; posticæ linea duplicata.*

*Synopsis phigalaria, Guen. Phal. i. 225, 336, pl. 4, f. 1.*

*North America.*

## Africa.

## 7. SYNOPSIS? BOISDUVALARIA.

*Caput, thorax, et abdomen subcinerascentia ; antennæ rufæ ; alæ anticæ supra fusco nigricantes, albo cinereo marginatæ, in medio longitudinaliter nigro unilineatæ atque unipunctatæ, subtus cinereæ, fimbria alba nigro punctata ; alæ posticæ supra subtusque subcinereæ, in medio nigro univittatæ.*

*Boarmia Boisduvalaria, Lucas, Explor. Scient. de l'Alger. Anim. Artic. iii. 391, 129, pl. 4, f. 1.*

*Synopsis Boisduvalaria, Guen. Phal. i. 227, 339.*

*Constantina.*

## Genus 10. PHASELIA.

**Corpus robustum.** Proboscis obsoleta. Palpi vix conspicui, incumbentes, contigui. Antennæ maris et fœm. pectinatæ. Thorax brevissimus, gibbus. Abdomen glabrum, apice obtusum, alas posticas superans. Pedes breves, graciles; tibiæ posticæ gracillimæ, bicalcaratæ. Alæ lituris paucis, fimbria notata; anticæ acutæ, subfalcatæ, costa convexa, margine exteriori concavo.

*Phaselina*, *Guen. Phal.* i. 228.

*Synopsia*, p. *Lederer*.

**Body robust.** Proboscis none. Palpi rudimentary, incumbent, conniving, hardly visible. Antennæ rather short, pectinated to the tips in both sexes. Thorax elevated, very short. Abdomen smooth, extending beyond the hind wings, obtuse at the tip in both sexes. Legs short, slender; hind tibiæ very slender, with only one pair of spurs. Wings with few markings; fringe long. Fore wings acute, subfalcate; costa concave; exterior border very convex.

## 1. PHASELIA PHÆOLEUCARIA.

**Mas.** *Alba; thorax nigro-cinereo varius; alæ anticæ nigricante conspersæ, lineis duabus nigris dentatis remotis, fasciis duabus olivaceo-cinereis, atomis marginalibus olivaceis; posticæ linea cinerea duplicata subobsoleta.*

*Synopsia phæoleucaria*, *Lederer, Lep. Siber. Zool. Bot. Ver.* 1855, 18, pl. 2, f. 3.

*Phaselina phæoleucaria*, *Guen. Phal.* i. 228, 343.

Altai.

## 2. PHASELIA DELICIOSARIA.

**Mas et fœm.** *Alba; alæ vix dentatæ; anticæ spatio basali ligno-fuscescente, lineis duabus nigris, 1a biangulata, 2a bisinuata valde remota, lineis duabus exterioribus fuscis; posticæ linea una duplicata, striga tenui discali.*

*Synopsia deliciosaria*, *Lederer, Lep. Syrisch. Zool. Bot. Ver.* 1855, 35, pl. 3, f. 4.

*Phaselina deliciosaria*, *Guen. Phal.* i. 229, 344.

Beyrout.

## Genus 11. CALAMODES.

Corpus gracile. Proboscis breviuscula. Palpi brevissimi; articulus 3us minimus. Antennæ graciles. Thorax quadratus, brevissimus; tegulæ remotæ. Abdomen glabrum, conicum. Pedes graciles; tibiæ posticæ non incrassatæ. Alæ vix dentatæ; anticæ elongatæ, apice rotundatæ, margine exteriori sat obliquo; posticæ latæ. *Mas.*—Antennæ pectinatæ, apice simplices, ramis pubescentibus. *Fæm.*—Oviductus exsertus.

*Calamodes*, *Guen. Phal.* i. 229.

*Boarmia*, p. *Dup.*; *Frey.*; *Boisd.*; *Herr.-Sch.*

Body slender. Proboscis rather short. Palpi very short, not extending to the front; third joint very minute. Antennæ slender. Thorax quadrate, very short; lappets far apart. Abdomen smooth, conical. Legs slender; hind tibiæ not incrassated, with short spurs. Wings hardly dentate. Fore wings elongate, rounded at the tips; exterior border rather oblique. Hind wings broad. *Male.*—Antennæ rather broadly pectinated except towards the tips; branches pubescent. *Female.*—Abdomen with a prominent oviduct.

## 1. CALAMODES OCCITANARIA.

*Albida, nigro conspersa; alæ lunulis marginalibus nigris, lineis indeterminatis fuscis; anticæ lineis duabus remotis nigris costam versus dentatis, 2a subundulata; posticæ linea una nigra antice obsoleta.*

*Boarmia occitanaria*, *Dup. Lep.* iv. 360, pl. 159, f. 5. *Frey. Beitr.* pl. 210, f. 1, 2. *Boisd. Ind.* 197, 1561. *Herr.-Sch. Eur. Schm.* iii. 79, 205, f. 32.

*Calamodes occitanica*, *Guen. Phal.* i. 230, 345.

*a, b.* South France. From M. Becker's collection.

## Genus 12. CLEORA.

Corpus gracile. Proboscis brevis, gracilis. Palpi gracillimi, caput paullo superantes; articulus 3us conicus, parvus. Pedes graciles, læves, breviusculi; tibiæ posticæ non incrassatæ. Alæ integræ, velutinæ, conspersæ, subnebulosæ; anticæ vix acutæ. *Mas.*—Antennæ pectinatæ, apice simplices. *Fæm.*—Antennæ filiformes aut crenulatæ.

*Cleora*, *Curt. Brit. Ent.* 88; *Steph.*; *Dup.*; *Guen. Phal.* i. 230.

*Boarmia*, p. *Treit.*; *Boisd.*; *Herr.-Sch.*; *Leder.*

*Synopsia*, p. et *Dryocoetis*, p. *Hübner. Verz. Schm.* 316, 317.

Body slender. Proboscis short, slender. Palpi very slender, extending a little beyond the head; third joint conical, minute. Legs slender, smooth, rather short; hind tibiæ not incrassated, with moderately long spurs. Wings entire, velvety, speckled, somewhat clouded. Fore wings hardly acute; exterior border moderately oblique. *Male*.—Antennæ pectinated except at the tips. *Female*.—Antennæ filiform or crenulate, with pale rings.

## Europe.

### 1. CLEORA VIDUARIA.

*Alba*; thorax nigro bifasciatus; abdomen e punctis nigris bilineatum; alæ fusco subconspersæ, guttis marginalibus nigris; anticæ lineis macularibus nigris fusco submarginatis.

*Phalæna angularia*, *Thunb. Diss. Ins. Suec.* 59, pl. 4. *Fabr. Ent. Syst.* iii. 2, 144, 55. *Lasp. Krit. Rev.* 125.

*Geometra viduaria*, *Wien. Verz.* 101, 9. *Bork. Eur. Schm.* v. 172, 69. *Hübner. Geom.* pl. 31, f. 165; pl. 70, f. 364. *Ill. N. Ausg. dess.* i. 387, 9; *N. Mag.* ii. 157, 9. *Lang. Verz.* 2, 179, 1247.

*Synopsia viduaria*, *Hübner. Verz. Schm.* 317, 3067.

*Boarmia viduaria*, *Treit. Schm.* i. 223, 15. *Dup. Lep.* iv. 370, pl. 161, f. 1. *Boisd. Ind.* 198, 1569. *Herr.-Sch. Eur. Schm.* iii. 81, 213.

*Cleora viduaria*, *Steph. Ill. Brit. Haust.* iii. 182. pl. 30, f. 2. *Guen. Phal.* i. 231, 346.

a, b. England. Presented by F. Smith, Esq.

c—f. England. From Mr. Stephens' collection.

g—i. England. From Mr. Turner's collection.

j. Scotland. From Mr. Stevens' collection.

k, l. Europe. From M. Becker's collection.

### 2. CLEORA PSORICARIA.

*Cinerea*; alæ pulvere nigricante adpersæ; anticæ striola media, striga transversa basali et altera externa flexuosa cum umbra externe adjacentis nigris, pulveratis; posticæ puncto medio strigæque externa nigricantibus.

*Boarmia psoricaria*, *Eversm. Bull. Soc. Imp. Nat. Mosc.* xxi. 3, 221, 12.

*Cleora psoricaria*, *Guen. Phal.* i. 232, 347.

Region of the Lower Volga.

### 3. CLEORA GLABRARIA.

*Albida* ; *thorax nigro fasciatus* ; *alæ nigro subconspersæ*, *linea exterior nigræ* ; *anticæ lineis duabus submarginalibus diffusis*, *linea interiore arcuata maculaque discali nigris*, *linea exterior angulata* ; *posticæ gutta discali nigra*, *linea exterior arcuata*.

*Geometra glabraria*, *Hübner. Geom.* pl. 31, f. 162 ; pl. 65, f. 339.

*Dryocoetis glabraria*, *Hübner. Verz. Schm.* 316, 3050.

*Boarmia glabraria*, *Treit. Schm.* vi. 1, 225, 16. *Dup. Lep.* iv. 397, pl. 163, f. 2. *Boisd. Ind.* 198, 1568. *Zell. Ent. Bresl.* 1850, 32. *Herr.-Sch. Eur. Schm.* iii. 214, 81.

*Geometra teneraria*, *Hübner. Geom.* pl. 67, f. 348.

*Cleora teneraria*, *Steph. Ill. Brit. Haust.* iii. 182.

*Cleora glabraria*, *Guen. Phal.* i. 233, 349.

a, b. England. From Mr. Stephens' collection.

c. England. From Mr. Bouchard's collection.

### 4. CLEORA LICHENARIA.

*Pallide cinerea*, *fusco conspersa* ; *alæ guttis marginalibus nigris*, *fimbria notata*, *linea undulata dentata nigra* ; *anticæ linea interiore subundulata nigra*.

———, *Wilk. Pap.* pl. 107 ; *Engl. Moths*, pl. 76.

*Geometra lichenaria*, *Wien. Verz.* 100, 8. *Fabr. Mant. Ins.* ii. 189,

49 ; *Ent. Syst.* iii. 2, 145, 59. *Knock, Schm.* i. pl. 3, f. 5—9.

*Bork. Eur. Schm.* v. 169, 68. *Sepp. Ned. Schm.* iv. pl. 15.

*Esp. Schm.* v. pl. 26, f. 6—9. *Hübner. Geom.* pl. 31, f. 164.

*Haw. Lep. Brit.* 280. *Ill. N. Ausg. dess.* i. 380, 8 ; *N. Mag.*

ii. 155, 8.

*Phalæna-Geometra lichenaria*, *Gmel. ed. Syst. Nat.* i. 5, 2467, 183.

*Geometra cineraria*, *Bork. Eur. Schm.* v. 165, 66.

*Synopsia lichenaria*, *Hübner. Verz. Schm.* 317, 3068.

*Geometra pictaria*? *Fabr. Ent. Syst.* iii. 2, 150, 76.

*Boarmia lichenaria*, *Treit. Schm.* i. 220, 14. *Dup. Lep.* iv. 380, pl.

161, f. 5. *Frey. Beitr.* i. pl. 71. *Boisd. Ind.* 198, 1570.

*Herr.-Sch. Eur. Schm.* iii. 82, 216.



*Cleora lichenaria*, *Steph. Ill. Brit. Haust.* iii. 181. *Guen. Phal.* i. 233, 350.

*a—t.* England. From Mr. Stephens' collection.

*v—z.* England.

*aa, bb.* Europe. From M. Becker's collection.

### Asia.

#### 5. CLEORA? PULINDA.

*Mas.* *Testaceo-cinerea, fusco conspersa; palpi porrecti, caput superantes; antennæ late pectinatae, apice filiformes; tibiæ posticæ non incrassatæ; alæ breviusculæ, lineis interiore et exteriori obscure fuscis; anticæ basi fuscae, macula discali exteriori obscure fusca.*

*Male.* Cinereous, testaceous-tinged, brown-speckled, paler beneath. Palpi porrect, extending somewhat beyond the head; third joint conical. Antennæ broadly pectinated to beyond two-thirds of the length; hind tibiæ not incrassated. Wings rather short; interior and exterior lines dark brown, slightly undulating in the fore wings, nearly straight in the hind wings. Fore wings with the speckles between the interior line and the base mostly confluent; a dark brown spot in the disk beyond the exterior line. Length of the body 4 lines; of the wings 10 lines.

*a.* Ceylon. Presented by Dr. Templeton.

### Australia.

#### 6. CLEORA? HYPOCHROMARIA.

*Muscoso-viridis; palpi rostriformes, articulo 3o distincto truncato; alæ subconsersæ, albido variæ, lineis tribus nigris dentatis, 1a subrecta, 2a flexa, 3a maculari interrupta; anticæ macula magna discali.*

*Cleora?* *hypochromaria*, *Guen. Phal.* i. 234, 351.

Australia.

### Country unknown.

#### 7. CLEORA NIGRIDORSARIA.

*Fœm.—Alba; thorax niger; alæ nigro subconsersæ, lineis subobsoletis; anticæ linea submarginali flexuosa angulata ochraceo submarginata, fascia subtilis nigra.*

*Cleora nigridorsaria*, *Guen. Phal.* i. 232, 348.

## Genus 13. BOARMIA.

Corpus sæpissime gracile. Proboscis distincta. Palpi compressi, squamosi, frontem paullo superantes; articulus 3us brevissimus. Pedes læves; tibiæ posticæ plus minusve dilatatæ. Alæ obscuræ, cinerascetes, nebulosæ, dentatæ aut subdentatæ, lituris non diversis, umbra media distincta lineari, linea exteriori dentata. *Mas.*—Antennæ pectinatæ aut valde ciliatæ. Abdomen attenuatum, lateribus villosis, apice quadrato. *Fem.*—Antennæ filiformes, squamosæ. Abdomen cylindricum, apice conicum.

*Arrhostia*, p., *Epimecis*, *Dryocoetis* et *Deileptinia*, *Hübner. Verz. Schm.* 312, 315, 316.

*Boarmia*, *Treit.*; *Dup.*; *Boisd.*; *Herr.-Sch.*; *Lederer*; *Guen.* *Alcis*, *Curt.*; *Steph.*

Body generally slender. Proboscis distinct. Palpi compressed, squamous, extending a little beyond the front; third joint very short. Legs smooth; hind tibiæ more or less incrassated. Wings dull, clouded, more or less cinereous and dentate, with like markings, with a distinct linear middle shade; exterior line dentate. *Male.*—Antennæ pectinated or strongly ciliated. Abdomen attenuated, villose on each side, quadrate at the tip. *Female.*—Antennæ filiform, squamous. Abdomen cylindrical, conical and acute at the tip.

## Europe.

## Group 1.

*Statura magna.* Alæ subtus nigro sæpissime marginatæ, macula apicali pallidiore; litura discalis non annulata.

## Group 2.

*Statura parva.* Abdomen basi nigro aut albo fasciatum. Alæ anticæ productæ, lunula discali concolori e squamis suberectis.

## Group 3.

*Statura magna.* Alæ litura discali annulata, linea exteriori semper dentata.

## Group 1.

A. *Statura mediocris Cleoræ affinis.* Alæ olivaceo tinctæ.  
ilicaria, *Hübner.*

- B. Statura mediocris aut magna. Alæ subtus nigro marginatæ, macula apicali pallida quadrata.**
- A. Alæ anticæ umbra discali lata nigra.** - umbraria, *Hübner*.
- B. Alæ anticæ nigro non plagiatae.**
- A. Alæ lineis albido non cinctis.**
- a. Alæ anticæ linea exteriori costam versus angulata.**
- i. Alæ anticæ albo lineatæ.** - secundaria, *Wien. Verz.*
- ii. Alæ anticæ albo non lineatæ.** - rhomboidaria, *Klém.*
- b. Alæ anticæ linea exteriori costam versus arcuata.**
- repandaria, Linn.**
- B. Alæ lineis albido cinctis.** - - perversaria, *Boisd.*
- C. Alæ rotundatæ, lineis macularibus.** - abietaria, *Wien. Verz.*

### 1. BOARMIA ILICARIA.

*Olivaceo-cinerea; alæ lineis tribus nigris, duabus exterioribus albo marginatis; anticæ linea media, lineis duabus exterioribus cuneatis.*

*Geometra ilicaria, Geyer, Geom. f. 582.*

*Boarmia ilicaria, Dup. Lep. Sup. iv. 59, pl. 55, f. 2. Boisd. Ind. 186, 1552. Herr.-Sch. Eur. Schm. iii. 78, 201, pl. 44, f. 265. Guen. Phal. i. 236, 352.*

*Var. Boarmia Manuelaria, Herr.-Sch. Eur. Schm. Sup. 73, f. 541.*

### 2. BOARMIA SECUNDARIA.

*Cinerea; alæ conspersæ, fuscescente plus minusve nebulosæ, lineis tribus subundulatis nigricantibus; anticæ striga discali nigricante, linea 2a angulata antice flexa.*

*Geometra secundaria, Wien. Verz. 101, 5. Hübn. Geom. pl. 29, f. 156. Ill. N. Ausg. dess. i. 385, 5. Esp. Schm. v. pl. 39, f. 7—9.*

*Deileptinia secundaria, Hübn. Verz. Schm. 317, 3063.*

*Boarmia secundaria, Treit. Schm. i. 218, 13. Dup. Lep. iv. 383, pl. 162, f. 2. Frey. Beitr. iii. pl. 276. Sepp. Ned. Schm. v. pl. 11, f. 1—8. Boisd. Ind. 197, 1558. Herr.-Sch. Eur. Schm. iii. 80, 206, pl. 40, f. 247. Guen. Phal. i. 237, 353.*

The specimens here registered (one of which is ticketed as *B. secundaria*) do not agree with the descriptions of that species, and have more resemblance to *B. rhomboidaria*.

**a—c. Europe.** From M. Becker's collection.

**d. Europe.** From Mr. Milne's collection.

## 3. BOARMIA UMBRARIA.

*Cinerascens ; alæ lunula media nigra ; antica lunula subumbra media late nigra latente ; posticae undique aequaliter signatae.*

*Geometra umbraria*, Hübn. *Geom.* f. 340.

*Epimecis umbraria*, Hübn. *Verz. Schm.* 315, 3042.

*Boarmia umbraria*, Dup. *Lep.* iv. 353, pl. 159, f. 1. *Eversm. Faun. Volg.-Ural.* 379? *Boisd. Ind.* 197, 1556. *Herr.-Sch. Eur. Schm.* iii. 81, 212. *Guen. Phal.* i. 237, 354.

Italy. Dalmatia. South France. Spain.

## 4. BOARMIA REPANDARIA.

*Cinerea ; alæ conspersæ, fusciscentis et lutescentis plus minusve nebulosæ, lineis duabus undulatis nigris, squamis pallidis erectis ; antica striga discali nigra.*

————— *De Vill. Ent. Linn.* ii. 333, 501.

*Phalaena-Geometra repandaria*, Linn. *Syst. Nat.* i. 866, 234 ; *Faun. Suec.* 1260. *Clerck. Icon.* pl. 6, f. 8. *Klém. Beytr.* 235, pl. 28, f. 1. *Scop. Ent. Carn.* 531. *Gmel. ed. Syst. Nat.*

*Geometra repandaria*, Wien. *Verz.* 101, 2. *Scop. Ent. Carn.* 215, 531. *Lang. Verz.* ii. 178, 1242. *Bork. Eur. Schm.* v. 154, 62. *Esp. Schm.* v. 226, pl. 41, f. 1—4. *Donov. Ins. Brit.* x. pl. 333, f. 1. *Schr. Faun. Boic.* ii. 2, 1612. *Hübn. Geom.* pl. 30, f. 161. *Haw. Lep. Brit.* 275. *Ill. N. Ausg. dess.* i. 384, 2. *Fuessl. Schw. Ins.* 40. 775.

*Geometra conversaria*, Hübn. *Geom.* pl. 62, f. 321 ; pl. 76. f. 393.

*Geometra cousobrinaria*, Scriba, pl. 3, f. 2 a.

*Geometra destrigaria*, Haw. *Lep. Brit.* 276.

*Boarmia repandaria*, Treit. *Schm.* i. 208, 9. *Dup. Lep.* iv. 342, pl. 158, f. 1. *Frey. Beitr.* iii. pl. 252. *Boisd. Ind.* 196. 1547. *Herr.-Sch. Eur. Schm.* iii. 81, 215. *Guen. Phal.* i. 238, 355.

*Alcis repandaria*, Steph. *Ill. Brit. Haust.* iii. 184.

*Deileptinia conversaria*, Hübn. *Verz. Schm.* 317, 3056.

*Boarmia conversaria*, Dup. *Lep.* iv. 358, pl. 159, f. 4.

*Alcis conversaria*, Steph. *Ill. Brit. Haust.* iii. 185.

*Alcis destrigaria*, Steph. *Ill. Brit. Haust.* iii. 185.

*Alcis muraria*, Curt. *Brit. Ent.* 113. *Steph. Ill. Brit. Haust.* iii. 185.

Var.? *Alæ subcinereæ, rude nigricante-pulveratæ, strigis undulatis pallidioribus et obscurioribus ; alæ antica striga externa flexuosa nigra maculaque discali nigricante, obsoletis.*

*Boarmia extinctaria*, *Everm. Bull. Soc. Imp. Nat. Mosc.* xxiv. 2, 638, 25.

*Irkoutzk.*

a—p. England. From Mr. Stephens' collection.

q—t. England.

u, v. Europe. From M. Becker's collection.

w, x. ——— ?

##### 5. BOARMIA RHOMBOIDARIA.

*Fuscescente-cinerea*; *alæ sublineatæ, nigro conspersæ, lunulis marginalibus atris, lineis exteriori et submarginali pallidis, illa flexa nigro punctata, litura discali nigra.*

——— *Klém. Beytr.* 120, pl. 14, f. 1, 2; 221, pl. 27, f. 1—8.

*Geometra rhomboidaria*, *Wien. Verz.* 101, 4. *Ill. N. Ausg. dess.* i. 385, 4. *Hubn. Geom.* pl. 29, f. 154; pl. 32, f. 170; pl. 95, f. 488. *Haw. Lep. Brit.* 276.

*Geometra gemmaria*, *Brahm. Ins. Kal.* ii. 1, 255, 151. *Bork. Eur. Schm.* v. 156, 63.

*Geometra consobrinaria*, *Haw. Lep. Brit.* 276.

*Deileptenia rhomboidaria*, *Hubn. Verz. Schm.* 317, 3058.

*Boarmia rhomboidaria*, *Treit. Schm.* i. 211, 10. *Dup. Lep.* iv. 349, pl. 158, f. 4, 5. *Frey. Beitr.* iii. pl. 288. *Boisd. Ind.* 197, 1554. *Herr.-Sch. Eur. Schm.* iii. 80, 210. *Guen. Phal.* i. 240, 359.

*Boarmia abstersaria*, *Boisd. Ind.* 197, 1555.

*Alcis rhomboidaria*, *Steph. Ill. Brit. Haust.* iii. 187.

*Alcis consobrinaria*, *Steph. Ill. Brit. Haust.* iii. 188.

a—ii. England. From Mr. Stephens' collection.

jj—nn. England.

oo—rr. Europe. From M. Becker's collection.

##### 6. BOARMIA PERVERSARIA.

*Cervino-cinerea* (mas) aut *albido-cinerea* (fœm.) *alæ strigis simplicibus, lateribus aversis albido cinctis; anticæ apice rotundatæ, striga media nulla.*

*Boarmia perversaria*, *Boisd. Ind.* 197, 1553. *Dup. Lep. Suppl.* iv. 60, pl. 55, f. 3. *Herr.-Sch. Eur. Schm.* iii. 78, 200, pl. 6, f. 35, 36; pl. 69, f. 425, 426. *Guen. Phal.* i. 242, 360.

Valais. Turkey.

## 7. BOARMIA ABIETARIA.

*Cinerea, fusco dense conspersa aut suffusa; alæ lineis indeterminatis, lunulis marginalibus atris, fimbria notata.*

*Phalæna-Geometra ribeata?* Linn. Faun. Suec. 1239. Clerck. Icon. pl. 6, f. 5.

*Geometra abietaria*, Wien. Verz. 101, 3. Hubn. Geom. pl. 309, f. 160. Ill. N. Ausg. dess. i. 385, 3.

*Geometra gemmaria abietis*, Esp. Schm. v. 217, pl. 39, f. 1—6.

*Deileptenia abietaria*, Hübn. Verz. Schm. 316, 3054.

*Boarmia abietaria*, Treit. Schm. i. 204, 7. Dup. Lep. iv. 365, pl. 160, f. 2, 3. Frey. Beitr. iii. pl. 264. Boisd. Ind. 197, 1557.

Herr.-Sch. Eur. Schm. iii. 79, 202. Guen. Phal. i. 243, 364.

*Alcis sericearia*, Curt. Brit. Ent. pl. 113. Steph. Ill. Brit. Haust. iii. 186.

a, b. England. From Mr. Stephens' collection.

c. England. From Mr. Bouchard's collection.

d, e. England.

f. Europe. From M. Becker's collection.

g, h. Europe.

## Group 2.

## 8. BOARMIA CINCTARIA.

*Fuscescente-cinerea; thorax nigro fasciatus; abdomen basi albidum; alæ conspersæ, lineis interiore et exteriori nigris undulatis, linea media minus determinata, linea submarginali pallida denticulata; antica lunula discali albida.*

——— Deg. Ins. ii. 358, pl. 6, f. 5.

*Geometra cinctaria*, Wien. Verz. 101, 6. Hubn. Geom. pl. 31, f. 166. Ill. N. Ausg. dess. i. 385, 6; N. Mag. ii. 155, 6.

*Geometra pascuaria*, Schwarz, 37, pl. 4, f. 5—7. Brahm. Ins. ii. 1, 120, 59. Bork. Eur. Schm. v. 159, 64. Esp. Schm. v. 237, pl. 43, f. 1—4.

*Dryocoetis cinctaria*, Hubn. Verz. Schm. 316, 304.

*Boarmia cinctaria*, Treit. Schm. i. 188, 1. Dup. Lep. iv. 365, pl. 159, f. 2, 3. Boisd. Ind. 197, 1559. Herr.-Sch. Eur. Schm. iii. 80, 207. Guen. Phal. i. 248, 375.

*Alcis cinctaria*, Curt. Brit. Ent. pl. 88. Steph. Ill. Brit. Haust. iii. 183.

a—h. England. From Mr. Stephens' collection.

l, m. England. From Mr. Stevens' collection.

n—p. Europe. From M. Becker's collection.

## 9. BOARMIA CONSIMILARIA.

*Cinerea, cervino nebulosa; alæ linea exteriorè subundulata nigra albo marginata, fascia fusca lineaque alba angulosa submarginalibus; antica lineis duabus interioribus lineaque media nigris.*

*Boarmia consimiliaria*, Dup. *Lep.* iv. 386, pl. 162, f. 1. *Boisd. Ind.* 197, 1560. *Guen. Phal.* i. 248, 378.

South France.

## Group 3.

## 10. BOARMIA ROBORARIA.

*Albo-cinerea; alæ subconspersæ, vix nebulosæ, lineis denticulatis incompletis lunulis marginalibus lituraque discali nigris; antica lineis apud marginem interiorem dilatatis.*

————— *Albin, Ins.* pl. 93, f. a, b.

*Phalæna-Geometra roboraria*, *Gmel. ed. Syst. Nat.* i. 5, 2451, 609.

*Geometra roboraria*, *Wien. Verz.* 101, 1. *Fabr. Mant. Ins.* ii. 187, 23; *Ent. Syst.* iii. 2, 137, 28. *Ill. N. Ausg. dess.* i. 384, 1. *Brahm. Ins. Kal.* ii. 1, 160, 80. *Scriba, Beytr.* i. 23, pl. 3, f. 1. *Bork. Eur. Schm.* v. 147, 59. *Esp. Schm.* v. 213, pl. 38, f. 1—3. *Donov. Brit. Ins.* pl. 527. *Hubn. Geom.* pl. 32, f. 169. *Haw. Lep. Brit.* 276.

*Dryocoetis roboraria*, *Hubn. Verz. Schm.* 316, 3043.

*Boarmia roboraria*, *Treit. Schm.* i. 198, 4. *Dup. Lep.* iv. 335, pl. 157, f. 2, 3. *Frey. Beitr.* iii. pl. 270. *Boisd. Ind. Meth.* 196, 1548. *Herr.-Sch. Eur. Schm.* iii. 81, 211. *Guen. Phal.* i. 252, 385.

*Alcis roboraria*, *Steph. Ill. Brit. Haust.* iii. 187.

a—c. England. From Mr. Stephens' collection.

f—l. England. From Mr. Stevens' collection.

m—o. England.

p. Europe. From M. Becker's collection.

## 11. BOARMIA CONSORTARIA.

*Albida, fusco dense conspersa; thorax fusco fasciatus; alæ lineis denticulatis annuloque discali fuscis, lunulis marginalibus nigris.*

————— *De Vill. Ent. Linn.* iv. 496.

*Geometra consortaria*, *Fabr. Ent. Syst.* iii. 2, 137, 29. *Bork. Eur. Schm.* v. 149, 60. *Sepp. Ins.* iv. pl. 5. *Esp. Schm.* v. 215, pl. 38, f. 4, 5. *Donov. Brit. Ins.* pl. 333, f. 2. *Hubn. Geom.* pl. 32, f. 168. *Haw. Lep. Brit.* 275.

*Geometra consobrinaria*, *Scriba, Beytr.* i. 25, pl. 3, f. 2 b. *Bork. Eur. Schm.* v. 152, 61. *Hubn. Geom.* pl. 29, f. 152? *Sepp. Ins.* v. pl. 7.

*Dryocoetis consortaria*, *Hubn. Verz. Schm.* 316, 3044.

*Boarmia consortaria*, *Treit. Schm.* i. 200, 5. *Dup. Lep.* iv. 339, pl. 157, f. 4. *Eversm. Faun. Volg.-Ural.* 380. *Boisd. Ind.* 196, 1551. *Herr.-Sch. Eur. Schm.* iii. 80, 208. *Guen. Phal.* i. 253, 387.

*Alcis consortaria*, *Steph. Ill. Brit. Haust.* iii. 186.

*a—h.* England. From Mr. Stephens' collection.

*i, j.* England.

*k, l.* Europe. From M. Becker's collection.

## 12. BOARMIA SELENARIA.

*Albido-cinerea, fusco conspersa; alae linea exteriori undulata distincta lunulaque marginali fuscis, linea submarginali pallida denticulata postice indistincta, punctis marginalibus nigris.*

————— *De Vill. Ent. Linn.* ii. 317, 451.

*Geometra Selenaria*, *Wien. Verz.* 101, 7? *Bork. Eur. Schm.* v. 67? *Hubn. Geom.* pl. 31, f. 163. *Ill. N. Ausg. dess.* i. 385, 7.

*Phalæna furcaria*, *Fabr.* iii. 2, 141, 44?

*Ascotis Selenaria*, *Hubn. Verz. Schm.* 313, 3029.

*Boarmia Selenaria*, *Treit. Schm.* v. 194, 3. *Dup. Lep.* iv. 362, pl. 160, f. 1. *Eversm. Faun. Volg.-Ural.* 379. *Frey. Beitr.* i. pl. 71, f. 2. *Boisd. Ind.* 196, 1549. *Herr.-Sch. Eur. Schm.* iii. 80, 209, pl. 61, f. 374—376. *Guen. Phal.* i. 254, 389.

Austria. Hungary. Turkey. South Russia.

*a, b.* Europe. From M. Becker's collection.

## North America.

### Group 1.

Like the second European Group.

### Group 2.

Like the third European Group.



## Group 1.

The species of this group will form smaller groups, in some of which the more northern kind is represented by the more southern one.

**A. Alæ linea exteriorē dentatā.****A. Alæ anticæ fascia interiorē nullā.****A. Abdomen non attenuatum. Antennæ maris non late pectinatæ.**

a. Alæ anticæ nigro quadrifasciatæ. - Titea, Cram.

b. Alæ anticæ nigro non quadrifasciatæ.

i. Alæ lineis non concisis. - - - sublunaria, Guen.

ii. Alæ lineis concisis. - - - signaria, Walk.

**B. Abdomen attenuatum. Antennæ maris late pectinatæ.**

a. Alæ pallidiores. - - - - - indicataria, Walk.

b. Alæ obscuriores. - - - - - filaria, Walk.

**B. Alæ anticæ fascia interiorē distinctā.**

A. Alæ anticæ linea media subobsoleta. - intraria, Guen.

B. Alæ anticæ linea media antice distincta. transfixaria, Walk.

**B. Alæ linea exteriorē non dentatā.****A. Alæ schistacæ.**

A. Alæ nebulosæ. - - - - - momaria, Guen.

B. Alæ non nebulosæ. - - - - - larvaria, Guen.

**B. Alæ non schistacæ.****A. Alæ nebulosæ.**

a. Alæ lineis valde obliquis.

i. Alæ flavescente tinctæ.

\* Alæ anticæ fascia nulla interiorē. pampinaria, Guen.

\*\* Alæ anticæ fascia interiorē. - frugaliaria, Guen.

ii. Alæ flavescente non tinctæ. - clivinaria, Guen.

b. Alæ lineis non valde obliquis. - - humaria, Guen.

**B. Alæ non aut vix nebulosæ.**

a. Alæ litura discali alba, convexa. - albigenaria, Walk.

b. Alæ litura discali non alba.

i. Alæ posticæ linea exteriorē angulata,

defectaria, Guen.

ii. Alæ posticæ linea exteriorē vix angulata.

\* Alæ spatio marginali obscuriore. - ephyraria, Walk.

\*\* Alæ spatio marginali non obscuriore.

intractaria, Walk.

## 13. BOARMIA PAMPINARIA.

*Cinerea, nigro conspersa ; abdomen nigro cristatum, basi albidum ; alæ lineis tribus perobliquis subundulatis ex parte dilatatis fusco diffuse marginatis, linea submarginali albida angulosa, punctis marginalibus nigris, annulo discali indistincta.*

*Boarmia pampinaria, Guen. Phal. i. 245, 367.*

Baltimore.

*a—g.* St. John's Bluff, East Florida. Presented by E. Doubleday, Esq.

## 14. BOARMIA OLIVINARIA.

*Cinereo-alba, nigro conspersa, B. pampinariæ affinis ; alæ lituris marginalibus bene determinatis, fimbria nigro notata, lineis interiore et exteriori duplicatis, linea submarginali umbrata ; antica linea media, tenui.*

*Boarmia clivinaria, Guen. Phal. i. 245, 368.*

California.

## 15. BOARMIA FRUGALIARIA.

*P. pampinariæ valde affinis ; alæ magis flavescentes, lineis ferrugineo submarginatis ; posticæ litura discali lineari elongata obliqua.*

*Boarmia frugaliaria, Guen. Phal. i. 246, 369.*

Georgia.

## 16. BOARMIA HUMARIA.

*Mas. Fuscescente-cinerea ; alæ lineis nigris bene determinatis cervino marginatis, linea exteriori valde sinuata umbræque media confluentibus ; posticæ lineis duabus, 1a recta, 2a sinuata.*

*Boarmia humaria, Guen. Phal. i. 246, 370.*

Georgia.

*Var. ? Male.* Cinereous, thinly black-speckled. Antennæ moderately pectinated, except at the tips. Hind tibiæ incrassated. Wings with the interior and exterior lines very distinct, blackish brown, undulating, slightly angular ; middle band brown, diffuse and incomplete in the fore wings, concise and distinct in the hind

wings; marginal space brown, including the pale cinereous zigzag submarginal line, and with a darker brown patch in each wing; marginal points blackish brown; discal mark whitish, lunulate, brown-bordered; under side without marks, except a brown discal lunule. Fore wings with the exterior line deeply undulating; under side with a large brown patch near the tips. Length of the body 6—7 lines; of the wings 16—18 lines.

a—A. Trenton Falls, New York. Presented by E. Doubleday, Esq.

Var.  $\beta$ . Wings paler; submarginal line whitish, more defined.

b—m. Nova Scotia. From Lieut. Redman's collection.

#### 17. BOARMIA INTRARIA.

*Cinerascens*, B. *humariæ affinis*, *umbra media tenuiore concisa*, *linea submarginali magis distincta*, *litura discali ovata cinerea nigro marginata squamis elevatis*; *posticæ linea subrecta*.

*Boarmia intraria*, Guen. *Phal.* i. 246, 371.

Baltimore.

Var.  $\rho$  Male. Whitish cinereous, thinly black speckled. Head and thorax with a black band on each. Abdomen with two rows of black points. Wings with the exterior line black, undulating, dentate, having beyond it two diffuse and partly concurrent brown bands, of which the second contains the whitish zigzag submarginal line; marginal points black; discal ringlet elongated, especially distinct on the under side, where it is almost wholly black; middle line indistinct. Fore wings with the interior line curved, and including a brown band between it and the base. Length of the body 6 lines; of the wings 17 lines.

a, b. St. John's Bluff, East Florida. Presented by E. Doubleday, Esq.

#### 18. BOARMIA DEFECTARIA.

*Cinereo-alba*; *tibiæ posticæ incrassatæ*, *albo penicillatæ*; *alæ squamis elevatis*, *lineis duabus nigris angustis valde sinuatis cervino marginatis*, *linea submarginali pallida dentata*, *umbra media lineari*, *lunula discali concolori*.

*Boarmia defectaria*, Guen. *Phal.* i. 247, 372.

North America.

*Var.?* *Male.* Whitish cinereous, very thinly and minutely black-speckled. Antennæ moderately pectinated, except towards the tips. Hind tibiæ tincrassated. Wings with the interior and exterior lines black, slender, undulating, angular; three very indistinct and diffuse brownish bands, of which the first is between the interior line and the base; the second and the third are beyond the exterior line, and the whitish zigzag submarginal line may be indistinctly traced between; marginal points black, minute; discal ringlet elongated, blackish; under side like that of the preceding species. Fore wings with a slight middle line, which traverses the ringlet and is there white-speckled; a black streak extending from the fore angle of the exterior line, which, like the other lines, is dilated on the costa. Hind wings with the interior line clouded; ringlet connected with the exterior line. Length of the body 6 lines; of the wings 16 lines.

*a—d.* New York. Presented by E. Doubleday, Esq.

#### 19. BOARMIA LARVARIA.

*Mas.* *Cinereo-alba, nigro subconspersa; tibiæ posticæ valde incrassatæ; alæ lineâ media nigra tenui angulata, annulo discali ovali; anticæ lineâ interiore valde abbreviata; posticæ umbra arcuata apud marginem interiorem.*

*Boarmia larvaria, Guen. Phal. i. 247, 373.*

Canada.

*Var.?* *Mas.* *Cinereo-alba, nigricante subconspersa; caput et thorax nigro fasciata; alæ longiusculæ, lineis duabus angustis angulatis punctisque marginalibus nigris, annulo discali nigricante elongato; anticæ lituris costalibus nigricantibus.*

*Male.* Cinereous whitish, thinly and very minutely blackish speckled. A black line across the head and another in front of the thorax. Antennæ moderately pectinated, except towards the tips. Hind tibiæ incrassated. Wings rather long, without lines, except the two ordinary lines, which are black, slender, angular and well-defined; marginal points black, minute; discal mark forming a blackish elongated ringlet. Fore wings with blackish marks along the costa; under side with an elongated blackish spot. Hind wings with a blackish cloud along the interior line. Length of the body 6 lines; of the wings 17 lines.

*a.* Orilla, West Canada. From Mr. Bush's collection.

## 20. BOARMIA MOMARIA.

*Schistaceo-cinerea, nigro conspersa; thorax nigro fasciatus; alæ lineis angustis undulatis sat obliquis ferrugineo marginatis, annulo discali punctisque marginalibus nigris, linea submarginali albida angulosa antice dilatata; anticæ linea media tenui.*

*Boarmia momaria*, Guen. *Phal.* i. 247, 374.

*a—f.* St. John's Bluff, East Florida. Presented by E. Doubleday, Esq.

## 21. BOARMIA SUBLUNARIA.

*Fœm. B. cinctariæ simillima, pallidior; alæ umbra basali saturatiore bene determinata, umbra media nulla; abdomen basi nigro late fasciatum.*

*Boarmia sublunaria*, Guen. *Phal.* i. 248, 376.

North America

*Var.?* Pale cinereous, brown-speckled. Wings with brown lines and bands; the former marked on the veins by cuneiform black dots; submarginal line whitish, zigzag; marginal points black; discal mark indistinct. Fore wings with the lines dilated along the costa. Length of the body 5—7 lines; of the wings 16—20 lines.

*a—g.* Trenton Falls, New York. Presented by E. Doubleday, Esq.  
*h, i.* St. John's Bluff, East Florida. Presented by E. Doubleday, Esq.

*j—m.* Nova Scotia. From Lieut. Redman's collection.

## 22. BOARMIA TITEA.

*Cinereo-albida; corpus nigro fasciatum; alæ anticæ nigro conspersæ, fasciis quatuor nigris, 2a postice abbreviata, 3a 4a que subduplicatis; posticæ lineis duabus transversis nigris extus abbreviatis.*

*Phalæna Titea*, Cram. *Pap. Exot.* iii. 148, pl. 275, f. C.

*Deileptenia Titearia*, Hübn. *Verz. Schm.* 317, 3064.

*Boarmia Titearia*, Guen. *Phal.* i. 248, 377.

Virginia.

## 23. BOARMIA SIGNARIA.

**Fœm.** *Albido-fusca; thorax nigricante fasciatus; tibiæ posticæ vix incrassatæ; alæ lineis interiore et exteriori fuscis dentatis subundulatis, fascia adhuc exteriori fusca, spatio marginali fuscescente lineam albidam submarginalem includente, litura discali subobsoleta, punctis marginalibus nigricantibus.*

**Female.** Whitish, brown-speckled. Thorax with a blackish band. Hind tibiæ very slightly incrassated. Wings with the interior and exterior lines brown, dentate, slightly undulating, darker brown on the angles than elsewhere; exterior line accompanied on the outer side by a parallel brown band, the latter containing some darker brown streaks, which are opposite the angles of the line; marginal space brownish, containing the whitish submarginal line; marginal points blackish; under side more cinereous, with the markings very indistinct. Length of the body 5 lines; of the wings 14 lines.

**a.** Nova Scotia From Lieut. Redman's collection.

## 24. BOARMIA INDICATARIA.

**Mas.** *Cinerea, fusco dentissime conspersa; antennæ late pectinatae; alæ lineis duabus fuscis undulatis indeterminatis, spatio marginali fusco lineam albidam angulosam submarginalem includente, gutta discali subtus conspicua lunulisque marginalibus nigris.*

**Male.**—Cinereous, very thickly speckled with brown. Antennæ broadly pectinated, simple towards the tips. Wings with the interior and exterior lines brown, undulating, somewhat confused with the speckles, black and distinct by the costa of the fore wings; marginal space brown, including the white zigzag submarginal line; marginal lunules black; discal mark not very apparent above, but forming a distinct black dot on the under side, where there is a black costal mark on the fore wings. Hind tibiæ much incrassated. Length of the body 7 lines; of the wings 18 lines.

**a.** United States. Presented by E. Doubleday, Esq.

**Var. β.** Wings less speckled; discal mark more apparent.

**b—e.** Trenton Falls, New York. Presented by E. Doubleday, Esq.

## 25. BOARMIA FILARIA.

**Mas.** *Fuscescente-cinerea, nigro conspersa; antennæ late pectinatae; abdomen attenuatum, alas posticas sat superans; alæ breviusculæ, linea exterior nigricante-fusca fuscisque duabus fuscis diffusis adhuc exterioribus, linea submarginali albida angulosa, lunulis marginalibus nigricantibus.*

**Male.**—Brownish cinereous, black-speckled. Antennæ broadly pectinated, except at the tips. Abdomen attenuated, extending somewhat beyond the hind wings. Hind tibiæ incrassated. Wings rather short; exterior line blackish brown, undulating, parallel to two more exterior diffuse brown bands, of which the second is limited on the outer side by the zigzag whitish submarginal line; middle line less distinct; marginal lunules blackish; discal mark lunulate in the fore wings, guttular in the hind wings; under side with the three lines apparent. Fore wings with a curved blackish brown interior line; a testaceous tinge along the costa, where there are many minute transverse black lines. Length of the body 8 lines; of the wings 16 lines.

**a.** East Florida. Presented by E. Doubleday, Esq.

## 26. BOARMIA TRANSFIXARIA.

**Fœm.** *Albida, nigro conspersa; caput nigro bifasciatum; alæ nigro lineatæ, linea media subinterrupta submaculari, linea exterior subdentata, lineis duabus adhuc exterioribus fuscis diffusis subundulatis, linea submarginali alba angulosa, punctis marginalibus annuloque discali nigris; anticæ striga discali nigra.*

**Female.**—Whitish, black-speckled. Head with two black transverse lines. Fore tibiæ and fore tarsi black, with white bands. Wings with black lines; middle line somewhat interrupted and macular, much curved towards the costa of the fore wings; exterior line slightly dentate, traversed in the fore wings by a black streak, followed by two diffuse slightly undulating brown lines, of which the second is mostly black opposite the streak, and contains the white zigzag submarginal line; marginal points black; discal mark forming an incomplete black ringlet, which is interrupted by the middle line in the fore wings, and contains a black point in the hind wings. Under side dingy whitish, without lines, except some black points which indicate the exterior line; fore wings with blackish costal marks, and with the discal ringlet more distinct than

that of the hind wings. Length of the body 5 lines; of the wings 14 lines.

a. East Florida. Presented by E. Doubleday, Esq.

## 27. BOARMIA ALBIGENARIA.

Mas et scem. *Albida, nigro subconspersa; alæ longiusculæ, lineæ exteriorē nigra undulata ex parte indistincta fasciæque adhuc exteriorē fusca diffusa subcontiguæ, fascia submarginali fusca magis diffusa lineam angulosam albam includente, punctis marginalibus nigris, annulo discali elongato.*

*Male and female.*—Whitish, thinly black-speckled. Hind tibiae much incrassated; fore tarsi blackish, with white bands. Wings rather long, with the exterior line black, undulating, here and there indistinct, parallel to a diffuse nearly contiguous more exterior brown band, which is partly interrupted, and has beyond it a still more diffuse brown band containing the white zigzag submarginal line; marginal points black; discal mark forming an elongated ringlet, which is sometimes obsolete in the fore wings. Under side without lines, but with a blackish submarginal band. *Male.*—Antennæ moderately pectinated, simple towards the tips. Length of the body 6—7 lines; of the wings 16—18 lines.

*Var. β. Mas.* *Albida, fusco subconspersa; alæ lineis tribus nigris angustis testaceo submarginatis, 1a arcuata, 2a tenui subrecta, 3a valde angulata, lineæ submarginali albida angulosa indistincta, annulo discali fusco elongato.*

*Male.*—Whitish, thinly and minutely brown-speckled. Antennæ moderately pectinated, except towards the tips. Hind tibiae much incrassated. Wings rather long, with three black slender partly testaceous-bordered lines; interior line curved; middle line slight, nearly straight; exterior line forming some acute angles; submarginal line whitish, zigzag, very indistinct; marginal points black; discal ringlet brown, elongate, indistinct; under side more cinereous, almost without markings. Length of the body 6 lines; of the wings 18 lines.

a—f. St. John's Bluff, East Florida. Presented by E. Doubleday, Esq.

g. Georgia. From Mr. Milne's collection.



28. *BOARMIA EPHYRARIA*.

**Mas et form.** *Albida, fusco conspersa; caput nigricans, albo fasciatum; alæ lineis duabus nigris obliquis angulatis antice remotis, spatio intermedio vix consperso, linea submarginali albida angulosa ex parte obsoleta, guttis marginalibus nigris, macula discali plagaque apicali subtus fuscis.*

**Male and female.** Whitish, brown-speckled. Head blackish, with a white band. Antennæ moderately pectinated, except at the tips. Hind tibiæ incrassated. Wings with the interior and exterior lines blackish, oblique, angular; intervening space almost without speckles, very broad in the fore wings; marginal space brownish at intervals, wherein may be traced the whitish zigzag submarginal line; marginal dots black, lunulate in the hind wings; discal ringlet elongated, distinct, wholly brown on the under side, where the fore wings have a large apical brown patch. Fore wings with the middle line much abbreviated hindward; exterior line very angular in front. Length of the body 5 lines; of the wings 14 lines.

**a, b.** Nova Scotia. From Lieut. Redman's collection.

29. *BOARMIA INTRACTARIA*.

**Mas.** *Pallide schistaceo-cinerea, vix conspersa; alæ lineis interiore et exteriori nigris angustis distinctis subundulatis, la subduplicata, linea submarginali albida angulosa, annulo discali fusco elongato; antica linea exteriori valde undulata, linea media tenui.*

**Male.** Pale slaty cinereous, hardly speckled. Antennæ moderately pectinated. Hind tibiæ much incrassated. Wings with the interior and exterior lines black, slender, distinct, slightly undulating; exterior line very undulating in the fore wings; interior line slightly double; middle line slight in the fore wings, almost obsolete in the hind wings; submarginal line whitish, zigzag; marginal points black; discal ringlet brown, elongated, touching the exterior line in the hind wings; under side almost without markings. Length of the body 5 lines; of the wings 14 lines.

This differs from the two preceding species in the much more oblique exterior border of the fore wings.

**a.** East Florida. Presented by E. Doubleday, Esq.

## Group 2.

## 30. BOARMIA GNOPHARIA.

*Cinerea; alæ fusco nebulosæ, nigricante conspersæ, lines quatuor dentatis nigris, subtus pallidissime flavescence-cinereæ macula discali nigra.*

Boarmia gnopharia, *Guen. Phal. i. 251, 383, pl. 5, f. 10.*

North America.

## 31. BOARMIA UMBROSARIA.

*Fusco-cinerea; alæ confertissime conspersæ, lineis dentatis albidis diffuse marginatis, macula discali nigra; anticæ linea submarginali apud medium optime determinata.*

Cymatophora prolixa-umbrosaria, *Hübner. Exot. Schm. i. vi. A, a.*

Dryocoetis umbrosaria, *Hübner. Verz. Schm. 316, 3047.*

Boarmia umbrosaria, *Guen. Phal. i. 251, 384.*

Georgia.

## 32. BOARMIA PORCELARIA.

*Mas. Subflavescence-cinerea, nigricante conspersa, B. gnophariæ affinis; caput nigro fasciatum; alæ striga discali arcuata; anticæ vesiculo basali.*

Boarmia porcelaria, *Guen. Phal. i. 252, 385.*

Georgia.

## 33. BOARMIA SIGNATARIA.

*Mas. Subcervino-cinerea; antennæ usque ad apices pectinatae; tibiæ posticæ subincrassatae; alæ fusco subconsersæ, lineis interiore et exteriori fuscis, 1a subrecta, 2a vix undulata ex parte dupliclata, linea submarginali e punctis obscure fuscis.*

*Male.* Cinereous, with a fawn-coloured tinge. Antennæ moderately pectinated to the tips. Hind tibiæ slightly incrassated. Wings very thinly brown-speckled; interior and exterior lines brown, slender, the former nearly straight, the latter hardly undulating, partly double in the fore wings; submarginal line composed of dark brown dots, much abbreviated hindward on the fore wings, and in front on the hind wings.

*Fœm. Alæ testaceo subinctæ, fasciis saturationibus testaceis, lineis interiore et media subobsoletis, linea exteriori subundulata, maculis adhuc exterioribus fuscis, linea submarginali guttulari, litura discali e puncto fusco.*

**Female.** Wings slightly tinged with testaceous, which hue is deeper, and forms bands along the brown lines; interior and middle lines almost obsolete; exterior line slightly undulating, accompanied on its outer side in the fore wings by three brown spots, the two hinder spots much smaller than the fore one, which is diffuse; submarginal line nearly straight, composed of dark brown elongated dots, which are whitish bordered on the outer side; marginal point blackish; discal mark forming a brown point; under side without lines. Fore wings with a dark brown spot on the fore part of the exterior border. Length of the body 6 lines; of the wings 16 lines.

**♂—d.** Nova Scotia. From Lieut. Redman's collection.

### Mexico.

#### 34. BOARMIA PLENARIA.

**Fœm.** *Cinereo-albida, fusco conspersa; thorax fusco fasciatus; tibiæ posticæ subincrassatæ; alæ lineis quatuor fuscis dentatis arcuatis subduplicatis, linea submarginali e guttis cuneatis, guttis marginalibus nigricantibus, macula discali fusca sat magna albo notata, fascia submarginali fusca latissima.*

**Female.** Cinereous whitish, brown-speckled. Thorax with a dark brown band in front. Hind tibiæ slightly incrassated. Wings with four dentate curved brown lines, which are slightly and diffusely doubled; submarginal line composed of cuneiform dots; marginal dots blackish, very distinct; discal mark forming a rather large brown spot with a white-speckled disk; under side with a brown very broad submarginal band. Length of the body 6 lines; of the wings 16 lines.

This species belongs to the second European group.

**♂. Mexico.** From Mr. Argent's collection.

### West Indies.

#### 35. BOARMIA DECURSARIA.

**Mas.** *Alba, sat robusta; antennæ late pectinatæ; alæ fusco subconspersæ, lineis nonnullis testaceis angulosis valde indistinctis, lineis interiore et exteriori nigricantibus, huc valde flexa, litura discali candida convexa fusco marginata.*

**Male.** White, rather stout. Antennæ broadly pectinated. Wings thinly and minutely brown speckled, with several very indistinct zigzag testaceous lines; interior and exterior lines blackish, the latter much bent, and with several angles; discal mark pure white, convex, irregular, brown-bordered. Hind wings beneath with a brown costal mark. Length of the body  $5\frac{1}{2}$  lines; of the wings 16 lines.

a. Jamaica. From Mr. Gosse's collection.

### 36. BOARMIA IDONEARIA.

**Mas et fœm.** *Albido-cinerea; thorax fuscescente fasciatus; tibiæ posticæ incrassatæ; alæ fuscescente conspersæ, lineis interioribus et exterioribus punctisque marginalibus nigris, annulo discali angusto; anticæ linea exteriori valde flexa.*

**Male and female.** Whitish cinereous. Thorax with a brownish band in front. Hind tibiæ incrassated, especially in the male. Wings with pale brownish speckles, which form undulating and very indistinct bands; interior and exterior lines black, slender, the former widely interrupted, the latter much bent in the fore wings; marginal points black; discal ringlet narrow, oblique; under side with a brown submarginal band. Fore wings beneath with a brown discal dot, and a white apical spot. **Male.**—Antennæ broadly pectinated, except towards the tips. **Female.**—Antennæ minutely serrated. Length of the body 5—6 lines; of the wings 14—16 lines.

a—d. St. Domingo. From Mr. Tweedie's collection.

e. St. Domingo. From Mr. Hearse's collection.

### South America.

The South American species may be divided into five groups, of which the first is like the first European group, the second is like the third European group, and the other three do not agree with any of the preceding divisions.

#### Group 1.

A. Alæ carneæ.	-	-	-	-	-	-	Merops, Cram.
B. Alæ viridescentes.	-	-	-	-	-	-	rectilinearia, Guen.
C. Alæ ochraceæ.	-	-	-	-	-	-	condensaria, Guen.
D. Alæ cinereæ.							
A. Abdomen basi fasciatum.	-	-	-	-	-	-	vacillaria, Walk.
B. Abdomen basi non fasciatum.							

- A. Alæ vix productæ. - - - - - inclinataria, *Walk.*  
 B. Alæ productæ. - - - - - dimidiaria, *Walk.*  
 E. Alæ albæ. - - - - - contraria, *Walk.*

## 37. BOARMIA? MEROPS.

*Carnea; alæ fasciis nebulosis saturatioribus, linea exteriorē serpentina angulata alba nigro marginata; anticæ lituris costalibus nigris; posticæ linea submarginali arcuata alba.*

*Phalæna Merops, Cram. Pap. Exot. i. 26, pl. 18, f. C.*

*Deileptinia Meropidaria, Hubn. Verz. Schm. 317, 3060.*

*Boarmia Meroparia, Guen. Phal. i. 239, 356.*

*Sarinam.*

## 38. BOARMIA RECTILINEARIA.

*Viridescens-ochracea; alæ dentatæ, nigro conspersæ; anticæ lineis quatuor nigricantibus, la 3a que parallelis rectis, umbra exteriorē denticulata, umbra media tenui recta, linea submarginali dentata non concisa; posticæ lineis duabus rectis parallelis.*

*Boarmia rectilinearis, Guen. Phal. i. 243, 362.*

*Brazil?*

## 39. BOARMIA CONDENSARIA.

*Ochraceo-cinerea; pedes ochracei, nigricante varii; alæ nigricante conspersæ, lunulis marginalibus nigris; anticæ fasciis plurimis indeterminatis e lituris nigricantibus.*

*Boarmia condensaria, Guen. Phal. i. 245, 366, pl. 6, f. 10.*

*Brazil.*

## 40. BOARMIA INCLINATARIA.

*Mas. Albida; antennæ subpectinatae; tibiæ posticæ incrassatæ; alæ fusco conspersæ, lineis tribus flexis undulatis nigricantibus, spatio marginali fuscescente lineam submarginalem albidam angulosam includente, fascia subtus marginali fusca maculam apicalem albidam includente.*

*Male. Whitish. Antennæ slightly pectinated, bare towards the tips. Hind tibiæ incrassated. Wings brown-speckled; interior, middle and exterior lines blackish, bent, undulating; marginal space brownish, traversed by the whitish zigzag submarginal line; marginal points and the elongated discal mark dark brown; under*

side with a brown marginal band, which is most distinct in the fore wings, where it includes a whitish apical spot. Length of the body 5 lines; of the wings 14 lines.

a. Santarem. From Mr. Bates' collection.

#### 41. BOARMIA CONTRARIA.

*Fœm. Alba, fusco conspersa; thorax nigro fasciatus; abdomen antice nigro quadriguttatum; tibiæ posticæ subincrassatæ; alæ lineis quatuor fuscis undulatis nigro notatis plus minusve interruptis, 2a 3aque subduplicatis, subtus obscure cinerea nigricante marginatæ, fimbria alba.*

*Female.* White, brown-speckled. Thorax with a black band in front. Abdomen with two black dots on each side towards the base. Hind tibiæ slightly incrassated. Wings with four more or less interrupted undulating brown lines, which are marked with black; second and third lines slightly doubled; marginal points black; under side dark cinereous, with a blackish marginal band; fringe white. Fore wings with the lines dilated and black on the costa. Length of the body 6 lines; of the wings 18 lines.

Rio Janeiro. In Mr. Fry's collection.

#### 42. BOARMIA VACILLARIA.

*Mas et fœm. Albido-cinerea, fusco ex parte nebulosa; antennæ maris sat late pectinatæ; thorax nigricante fasciatus; tibiæ posticæ subincrassatæ; alæ longiusculæ, lineis tribus nigris interruptis perobliquis fusco ex parte marginatis, linea interiore albida angulosa; anticæ subtus fascia marginali lata nigricante maculam albidam apicalem includente.*

*Male and female.* Whitish cinereous, partly clouded with brown. Antennæ of the male rather broadly pectinated, except towards the tips. Thorax with a blackish band. Hind tibiæ slightly incrassated. Wings rather long and narrow; interior, middle and exterior lines black, irregular, interrupted, very oblique, partly shaded with brown; marginal space partly brown, including the zigzag whitish submarginal line; interior line basal in the hind wings and connected with the black basal band of the abdomen; discal mark small; marginal points black. Fore wings beneath with a broad blackish marginal band, which is wider towards the costa, where it includes a whitish spot. Length of the body 5½ lines; of the wings 14—16 lines.

Rio Janeiro. In Mr. Fry's collection.

## 43. BOARMIA DIMIDIARIA.

**Mas.** *Sordide cinerea; antennæ sat late pectinatæ; thorax nigricante fasciatus; tibiæ posticæ incrassatæ; alæ longæ, angustæ, fusco conspersæ, fuscescente ex parte subtinctæ, lineis tribus nigris dentatis interruptis valde obliquis, linea submarginali albida angulosa interrupta denticulata fusca; anticæ lineis basali et interiore nigris.*

**Male.**—Dingy cinereous. Antennæ rather broadly pectinated. Thorax with a blackish band in front. Hind tibiæ incrassated. Wings long, narrow, brown-speckled, slightly and partly tinged with pale brown; interior, middle and exterior lines black, slender, dentate, interrupted, very oblique; submarginal line whitish, zigzag, interrupted, marked with brown; marginal points black; discal mark small, brown. Fore wings beneath with a broad brown submarginal band. Length of the body 4 lines; of the wings 14 lines.

**c—e.** Bogotá. From Mr. Stevens' collection. •

## Group 2.

- |                               |   |   |   |   |   |                     |
|-------------------------------|---|---|---|---|---|---------------------|
| A. Alæ albo variæ.            | - | - | - | - | - | validaria, Guen.    |
| B. Alæ albo non variæ.        |   |   |   |   |   |                     |
| A. Alæ non plagiæ.            |   |   |   |   |   |                     |
| a. Alæ cineræ.                |   |   |   |   |   |                     |
| a. Statura sat magna.         |   |   |   |   |   |                     |
| i. Abdomen nigro guttatum.    |   |   |   |   |   |                     |
| * Antennæ ramis brevioribus.  | - |   |   |   |   | bipennaria, Guen.   |
| ** Antennæ ramis longioribus. | - |   |   |   |   | unipennaria, Guen.  |
| ii. Abdomen non guttatum.     |   |   |   |   |   |                     |
| * Alæ fasciatæ.               | - | - | - |   |   | mollearia, Walk.    |
| ** Alæ non fasciatæ.          | - | - | - |   |   | demissaria, Walk.   |
| b. Statura parva.             |   |   |   |   |   |                     |
| i. Alæ productæ.              | - | - | - |   |   | detractaria, Walk.  |
| ii. Alæ non productæ.         |   |   |   |   |   |                     |
| * Alæ nebulosæ.               | - | - | - |   |   | guttularia, Walk.   |
| ** Alæ non nebulosæ.          | - | - | - |   |   | novaria, Walk.      |
| B. Alæ albæ.                  |   |   |   |   |   |                     |
| a. Alæ non fasciatæ.          | - | - | - |   |   | oppositaria, Walk.  |
| b. Alæ fasciatæ.              | - | - | - |   |   | umbellularia, Hübn. |
| B. Alæ plagiæ.                |   |   |   |   |   |                     |
| a. Alæ anticæ plaga apicali.  |   |   |   |   |   |                     |
| a. Alæ albidæ.                | - | - | - | - |   | inflexaria, Walk.   |
| b. Alæ non albidæ.            |   |   |   |   |   |                     |

- |                                 |   |   |                           |
|---------------------------------|---|---|---------------------------|
| i. Alæ plaga ferruginea.        | - | - | subferraria, <i>Walk.</i> |
| ii. Alæ plaga nigricante.       | - | - | defimaria, <i>Walk.</i>   |
| B. Alæ anticæ plaga subapicali. |   |   |                           |
| a. Alæ vix lineatæ.             | - | - | delinquaria, <i>Walk.</i> |
| b. Alæ anticæ lineis plurimis.  | - | - | larentiata, <i>Walk.</i>  |

## 44. BOARMIA VALIDARIA.

*Fœm. Ligno-fusca ; alæ subdentatæ, albo variæ, linea exteriorè arcuata dentata albo marginata ; anticæ costa ochracea, macula discali magna nigra.*

*Boarmia validaria, Guen. Phal. i. 255, 392.*

Rio Janeiro.

## 45. BOARMIA BIPENNARIA.

- *Cinerea ; alæ lineis exteriorè et submarginali angulosis parallelis nigricantibus, annulo discali angusto angulato ; posticæ lineis duabus interioribus angulosis.*

*Boarmia bipennaria, Guen. Phal. i. 257, 395, pl. 13, f. 5.*

Brazil.

## 46. BOARMIA UNIPENNARIA.

*B. bipennariæ simillima ; antennæ maris ramis longioribus, fœm. vix ciliatæ ; tibiæ posticæ minus incrassatæ.*

*Boarmia unipennaria, Guen. Phal. i. 257, 396.*

Brazil.

## 47. BOARMIA UMBELLULARIA.

*Alba ; alæ lineis duabus fasciisque duabus exterioribus lineas albas angulosas includentibus fuscis, linea 2a fasciæque 1a undulatis, fascia subtus marginali lata nigro-fusca.*

*Arrhostia umbellularia, Hübn. Zutr. 12, 215, f. 429, 430 ; Verz. Schm. 312, 3009.*

*Boarmia umbellularia, Guen. Phal. i. 258, 398.*

Brazil.

This species is closely allied to *B. novaria*, but appears to be distinct.



48. *BOARMIA MOLLEARIA*.

**Pœm.** *Albida, fusco conspersa; abdomen sat crassum; tibiæ posticæ subincrassatæ; alæ lineis tribus fuscis latis submacularibus, 2a apud venas nigricante, litura discali nigricante, punctis marginalibus nigris, subtus cinereæ fascia lata nigricante submarginali.*

**Female.** Whitish, brown-speckled. Antennæ simple, smooth. Abdomen rather thick. Hind tibiæ slightly incrassated. Wings with the middle, exterior and submarginal lines brown, broad, somewhat macular; middle line forming blackish marks on the veins; interior line less distinct; discal mark blackish, elongated, distinct; marginal points black; under side cinereous, with a broad blackish submarginal band. Length of the body 5 lines; of the wings 16 lines

**Rio Janeiro.** In Mr. Fry's collection.

49. *BOARMIA DEMISSARIA*.

**Mas.** *Albida; caput fuscum; antennæ late pectinatæ; tibiæ posticæ valde incrassatæ; alæ fuscescente subconspersæ, lineis quatuor guttularibus punctis marginalibus lituraque discali fuscis, fascia subtus fusca submarginali; anticæ lineis apud costam dilatatis obscurioribus.*

**Male.** Whitish. Head and palpi brown. Antennæ broadly pectinated, except at the tips. Hind tibiæ much incrassated. Wings with slight pale brown speckles, and with four lines, which are composed of brown dots on the veins; marginal points and discal mark brown, the latter elongated; under side with a brown submarginal band. Fore wings with the lines dilated and darker along the costa. Length of the body  $5\frac{1}{2}$  lines; of the wings 16 lines.

**a. Parà.** Presented by Gordon Graham, Esq.

50. *BOARMIA DETRACTARIA*.

**Mas.** *Cinerea; thorax fusco fasciatus; alæ longæ, angustæ, fusco subconspersæ, lineis nigricantibus denticulatis perobliquis, linea submarginali albida, punctis marginalibus punctoque discali nigris; anticæ linea interiore abbreviata.*

**Male.** Cinereous. Antennæ moderately pectinated, except at the tips. Thorax with a brown band. Hind tibiæ incrassated. Wings long, narrow, very minutely brown-speckled; lines blackish,

slight, very oblique, more denticulated in the fore wings than in the hind wings ; interior line much abbreviated in front of the fore wings ; submarginal line whitish ; marginal points and discal point black, the latter most distinct on the under side, which is without markings, except the submarginal band of the fore wings. Length of the body 4 lines ; of the wings 12 lines.

Rio Janeiro. In Mr. Fry's collection.

#### 51. BOARMIA GUTTULARIA.

*Fœm. Albido-cinerea ; alæ spissæ, velutinæ, nigro subconspersæ, rufescente subinctæ, fusco plagiata, linea exteriore nigra guttulari undulata, punctis adhuc exterioribus elongatis nigricantibus, linea submarginali fusca denticulata.*

*Female.* Whitish cinereous. Antennæ simple. Hind tibiae very slightly incrassated. Wings stout, velvety, slightly tinged with pale red, slightly and minutely black-speckled, with some brown irregular patches ; exterior line black, guttular, undulating, having a row of elongated blackish points between it and the submarginal denticulated brown line ; marginal points black, rather large ; discal mark forming a black dot ; under side without lines, except a submarginal brown band. Fore wings with black basal and interior lines. Length of the body 4 lines ; of the wings 10 lines.

Rio Janeiro. In Mr. Fry's collection.

#### 52. BOARMIA NOVARIA.

*Mas. Albido-cinerea ; tibiæ posticæ valde incrassatæ ; alæ subconspersæ, lineis pallide fuscis subdenticulatis, lineis exteriore et submarginali duplicatis fusco obscuro notatis, subtus cinerea, fascia marginali lata fusca.*

*Male.* Whitish cinereous. Antennæ moderately pectinated, except at the tips. Hind tibiae much incrassated. Wings slightly speckled ; lines pale brown, slightly denticulated ; exterior and submarginal lines double, more distinct than the interior line, accompanied on the veins by darker brown cuneiform marks ; marginal points and discal mark dark brown, elongated, distinct ; under side cinereous, with a broad brown marginal band. Length of the body  $4\frac{1}{2}$  lines ; of the wings 12 lines.

*a. Ega.* From Mr. Bates' collection.

## 53. BOARMIA DEFINARIA.

**Fœm.** *Cinereo-cervina, subtus testacea; tibiæ posticæ vix incrassatæ; alæ nigro conspersæ, lineis tribus nigris denticulatis indeterminatis interruptis pallido marginatis, gutta discali nigricante, lunulis marginalibus nigris, fascia subtus fere marginali cupreo-fusca.*

**Female.** Cinereous fawn-colour, testaceous beneath. Hind tibiæ hardly incrassated. Wings black-speckled, with three irregular interrupted black denticulate pale-bordered lines; discal dot blackish; marginal lunules black; under side without markings, except the discal dot and a cupreous-brown almost marginal band, which is dilated towards the costa of the fore wings, and is abbreviated hindward in the hind wings. Length of the body 5 lines; of the wings 14 lines.

**Rio Janeiro.** In Mr. Fry's collection.

## 54. BOARMIA SUBFERRARIA.

**MAZ.** *Pallide ferrugineo-cinerea; tibiæ posticæ incrassatæ; alæ fusco conspersæ, lineis interiore et exteriori nigris undulatis angulatis, linea submarginali pallida angulosa, punctis marginalibus nigris, annulo discali fusco elongato, fascia subtus marginali fusca postice obsoleta; antica plaga apicali ferruginea nigro marginata, macula subtus apicali alba.*

**Male.**—Pale cinereous, partly tinged with pale ferruginous. Antennæ moderately pectinated, except towards the tips. Hind tibiæ incrassated. Wings brown-speckled; interior and exterior lines black, undulating, angular; submarginal line pale, zigzag; marginal points black; discal ringlet brown, elongated; under side with white apical spot, and with a marginal brown band, which is obsolete hindward. Fore wings with a ferruginous apical patch, which is irregularly black-bordered hindward, and in which the submarginal line is diffusedly dilated on the outer side. Length of the body 6½ lines; of the wings 18 lines.

**B. Brazil.** From M. Becker's collection.

**B. f. Venezuela.** From Mr. Dyson's collection.

**B. Bogotá.** From Mr. Stevens' collection.

55. *BOARMIA INFLEXARIA*.

**Fœm.** *Albida, fusco conspersa; antennæ subcrenulatæ; thorax nigricante fasciatus; abdomen guttis lateralibus nigricantibus; tibiæ posticæ non incrassatæ; alæ fasciis interrupti subundulatis ferrugineis aut fuscis, lineis interiore et exteriore nigris undulatis angulatis, linea submarginali alba angulosa, punctis marginalibus nigris, litura discali fusca magna elongata; anticæ plaga apicali ferruginea nigro conspersa macula subtus apicali alba.*

**Female.** Whitish, thickly brown-speckled. Antennæ minutely crenulate. Thorax with a blackish band. Abdomen with two rows of blackish dots. Hind tibiæ not incrassated. Wing with indistinct and incomplete ferruginous or brown slightly undulating bands; interior and exterior lines black, undulating, angular; submarginal line white, zigzag; marginal points black; discal mark brown, large, elongated, most distinct beneath, where there is the usual submarginal brown band. Fore wings with a ferruginous black-speckled apical patch, in which the submarginal line is much dilated; under side with a white apical spot. Length of the body 6 lines; of the wings 18 lines.

This may be the female of *B. subferraria*, but the markings are somewhat different.

*a, b.* Venezuela. From Mr. Dyson's collection.

56. *BOARMIA DELINQUARIA*.

**Mas.** *Pallide cinerea, cervino tincta; thorax nigro fasciatus tibiæ posticæ incrassatæ; alæ lineis tribus nigricantibus interruptis indeterminatis, linea submarginali guttulari, punctis marginalibus nigris; anticæ plagis tribus nigricantibus; posticæ dentatæ, linea exteriore postice dilatata.*

**Male.** Pale cinereous, with a fawn-coloured tinge. Antennæ moderately pectinated, except at the tips. Thorax with a black band. Hind tibiæ incrassated. Wings with three blackish irregular interrupted lines; submarginal line composed of dots; marginal points black. Fore wings with a blackish patch near the base, with another on the interior border, and with a third on the fore part of the exterior border. Hind wings dentate; exterior line dilated hindward. Length of the body 6 lines; of the wings 16 lines.

Rio Janeiro. In Mr. Fry's collection.

57. *BOARMIA LARENTIATA*.

**Fœm.** *Ferrugineo-cinerea; tibiæ posticæ non incrassatæ; alæ latiusculæ, linea marginali nigra lunulata, subtus albidocinereæ fascia lata submarginali nigricante; anticæ lineis nigricantibus, 1a 2aque duplicatis lunulatis, 3a undulata, 4a angulosa, striga exteriori lata nigricante, linea submarginali angulosa albida.*

**Female.** Cinereous, mostly tinged with ferruginous. Hind tibiæ not incrassated. Wings rather broad; marginal line black, lunulate; under side whitish cinereous, with a discal streak, an undulating exterior line and a broad submarginal band blackish. Fore wings with blackish lines; basal and interior lines double, lunulate; middle line more undulating; exterior line with lanceolate angles, mostly double, emitting in front a broad blackish streak to the border; submarginal line whitish, zigzag, here and there obsolete. Hind wings with very indistinct lines. Length of the body 6 lines; of the wings 16 lines.

Rio Janeiro. In Mr. Fry's collection.

58. *BOARMIA OPPOSITARIA*.

**Mas.** *Alba; antenna late pectinata; alæ fusco conspersæ, lineis interiore et exteriori dentatis lituraque discali fuscis, linea marginali integra; anticæ costa pallide cervina fusco notata.*

**Male.** White. Antennæ broadly pectinated. Wings brown-speckled; interior and exterior lines brown, dentate; marginal line and discal mark also brown, the former continuous. Fore wings with a pale sawn-coloured tinge along the costa, where the lines are dilated, and have between them several minute transverse brown marks. Length of the body 6 lines; of the wings 16 lines.

Venezuela. From Mr. Dyson's collection.

## Group 3.

59. *BOARMIA INCEPTARIA*.

**Mas.** *Albido-cinerea; antenna pectinata; tibiæ posticæ subincrassatæ; alæ subconsersæ, lineis quinque subundulatis fusciscenti-cinereis, 4a 5aque macularibus, punctis marginalibus obscurioribus, subtus obscure cinereæ fimbria albida.*

*Male.* Whitish cinereous. Antennæ moderately pectinated, except at the tips. Hind tibiæ slightly incrassated. Wings very slightly speckled, with five brownish cinereous slightly undulating and angular lines; fourth and fifth lines macular; marginal points darker brown; discal dot elongated, distinct; under side dark cinereous, with a whitish fringe. Length of the body  $4\frac{1}{2}$  lines; of the wings 12 lines.

*a.* Venezuela. From Mr. Dyson's collection.

#### 60. BOARMIA PRIMITIARIA.

*Mas.* *Albido-cinerea; antennæ late pectinatæ; tibiæ posticæ subincrassatæ; alæ vix conspersæ, fasciis duabus undulatis fuscescentibus, lineis interiore et exteriori nigricantibus guttularibus, linea submarginali e guttis fuscescentibus.*

*Male.* Whitish cinereous. Antennæ broadly pectinated, except at the tips. Hind tibiæ slightly incrassated. Wings hardly speckled; interior and exterior lines blackish, guttular, each accompanied by an undulating brownish band; submarginal line composed of brownish dots; marginal points blackish, rather large; discal mark indistinct above, more conspicuous beneath. Length of the body  $3\frac{1}{2}$  lines; of the wings 10 lines.

*a.* Venezuela. From Mr. Dyson's collection.

#### Group 4.

#### 61. BOARMIA DENTICULARIA.

*Mas.* *Sordide cinerea; caput et thorax anticus fuscescentia; antennæ subpectinatæ; tibiæ posticæ non incrassatæ; alæ fusco conspersæ, lineis interiore et exteriori fuscis denticulatis subundulatis apud venas nigricantibus, punctis marginalibus guttaque discali nigris; anticæ subdentatæ; posticæ valde dentatæ.*

*Male.* Dingy cinereous. Head and fore part of the thorax brownish. Antennæ slightly pectinated, except towards the tips. Hind tibiæ not incrassated. Wings dentate, thickly brown-speckled; interior and exterior lines brown, denticulated, slightly undulating, blackish on the veins; marginal points and discal dot black; under side without markings. Hind wings much more dentate than the fore wings. Length of the body 5 lines; of the wings 15 lines.

Rio Janeiro. In Mr. Fry's collection.

## 62. BOARMIA CONSIMILARIA.

**Fœm.** *Fuscescente-cinerea, nigro conspersa; tibiæ posticæ vix incrassatæ; alæ fasciis indeterminatis cinereis, lineis tribus nigricantibus denticulatis, strigis quatuor exterioribus anticis punctisque marginalibus nigris, fascia subtus submarginali fusca.*

**Female.** Brownish cinereous, black-speckled. Hind tibiæ hardly incrassated. Wings with irregular cinereous bands; interior, exterior and submarginal lines blackish, slight, denticulated, most distinct on the veins; submarginal line with two black streaks, which are accompanied by two exterior corresponding marks; discal dot blackish; marginal points black; under side with a submarginal brown band. Length of the body 6 lines; of the wings 18 lines.

Rio Janeiro. In Mr. Fry's collection.

## 63. BOARMIA LOCUPLETARIA.

**Fœm.** *Ferrugineo-fusca; caput et thorax anticus nigricantia; palpi caput paullo superantes, articulo 3o longi-conico; tibiæ posticæ non incrassatæ; alæ amplæ, lineis nonnullis lunulatis fuscis lineisque tribus lunulatis nigris, linea 2a cinereo marginata, 3a ex parte albido marginata, lunulis marginalibus nigris.*

**Female.** Ferruginous-brown. Head and fore part of the thorax blackish. Palpi extending a little beyond the head; third joint elongate-conical. Legs rather stout; hind tibiæ not incrassated. Wings ample, with several lunulate brown lines, and with three lunulate black lines, which are more distinct than the others; interior line dilated and interrupted in the fore wings; exterior line bordered with cinereous on the outer side; submarginal line partly whitish bordered; marginal lunules black; under side dark cinereous, with a blackish marginal band, the latter including a pale irregular interrupted line, which forms a distinct apical spot. Length of the body 7 lines; of the wings 20 lines.

Rio Janeiro. In Mr. Fry's collection.

## 64. BOARMIA STIGMARIA.

**Fœm.** *Ferruginea, gracilis; antennæ subcrenulatæ; thorax nigricante fasciatus; alæ nigro conspersæ, fasciis indistinctis diffusis fuscis, lineis duabus nigris angulatis serpentinis, linea*

*submarginali pallida angulosa, litura discali e pilis squamosis erectis; antica vix dentata; postica valde dentata.*

*Female.* Ferruginous, slender. Antennæ minutely crenulated. Thorax with a blackish band. Wings black-speckled, with indistinct diffuse brown bands; interior and exterior lines black, slender, angular, serpentine; submarginal line pale, zigzag; discal mark forming a tuft of erect squamous plumes; under side with less distinct lines, with no submarginal band. Fore wings hardly dentate; marginal points less elongated than those of the hind wings, which are much dentated. Length of the body 6 lines; of the wings 16 lines.

Amazon Region. In Mr. Saunders' collection.

### Group 5.

#### 65. BOARMIA STRENUARIA.

*Fœm.* *Olivaceo-viridescens, subtus cinerea; antennæ subpubescentes; tibiæ postica vix incrassata; alæ spissæ, fusco confusæ, fascia subtus fusca submarginali; antica elongata, lineis nonnullis transversis undulatis punctisque marginalibus fuscis, lineis interiore et exteriori nigricantibus; posticae lituris nullis.*

*Female.* Dull olive-green, cinereous beneath. Antennæ minutely pubescent. Hind tibiæ very slightly incrassated. Wings stout, brown-speckled; under side with a brown submarginal band. Fore wings elongated, with several brown transverse undulating lines; interior and exterior lines blackish, more distinct than the others; marginal points brown; exterior border very oblique; discal mark indistinct. Hind wings without markings. Length of the body 6 lines; of the wings 16 lines.

a. Venezuela. From Mr. Dyson's collection.

### Africa.

The African species will form five groups; the first is like the first European group; the second is like the third European group, and the other three groups are new.

### Group 1.

#### 66. BOARMIA EMUNCTARIA.

*Fœm.* *Pallide testacea; alæ subdentatæ, fusco strigatæ; antica viridescente variâ, fusco strigatæ, lineis duabus fuscis sinuatis*



*dentatis, spatio intermedio pallido, linea submarginali dentata, macula discali subreniformi sat magna, spatio marginali obscuriore; posticæ testaceæ, apud angulum anteriorem viridescentes.*

*Boarmia emunctaria*, Guen. *Phal.* i. 244, 365.

*Abyssinia.*

Group 2.

67. *BOARMIA ACACIARIA.*

*Albida, fusco conspersa; thorax nigro fasciatus; alæ lineis interiore et exteriori nigricantibus angulosis subundulatis cervino marginatis, punctis marginalibus nigris, litura discali alba elevata fusco marginata, fascia submarginali maculaque discali subtus nigricantibus; anticæ striga discali exteriori nigra.*

*Boarmia acaciaria*, Bois. *Faun. Ent. Mad.* 116, pl. 16, f. 4. Guen. *Phal.* i. 255, 391.

Cape. Madagascar.

*a.* Port Natal. From M. Gueinzus' collection.

*f.* South Africa. Presented by Sir A. Smith.

*g.* Congo. Presented by Sir J. Richardson.

68. *BOARMIA PROXIMARIA.*

*Form. Albida, fusco conspersa; abdomen maculis lateralibus nigricantibus; tibiæ posticæ subincrassatæ; alæ lineis tribus undulatis fuscis nigro guttatis ex parte obsoletis, macula discali subtus punctisque lateralibus nigris.*

*Female.* Whitish, brown-speckled. Abdomen with two rows of blackish spots. Hind tibiæ slightly incrassated. Wings with three undulating partly obsolete brown lines, of which the exterior one is more incomplete than the other two, but is more distinguished than them by black dots on the veins; marginal dots black; discal mark obsolete above, forming a black spot beneath, where it is much larger in the fore wings than in the hind wings. Fore wings beneath with a black costal subapical spot, and with a brown mark on the exterior border. Length of the body 6 lines; of the wings 18 lines.

*a.* Port Natal. From M. Gueinzus' collection.

69. *BOARMIA RECIPROCARIA*.

**Mas et fœm.** *Albida, fusco conspersa; thorax nigro fasciatus; antennæ maris ciliato-serratæ; tibiæ posticæ incrassatæ; alæ lineis tribus angulosis undulatis obscure fuscis, fasciis tribus cervinis valde indistinctis, linea submarginali subobsoleta, punctis marginalibus nigricantibus, litura discali alba elevata fusco marginata.*

**Male and female.** Whitish, brown-speckled. Thorax with a black band. Antennæ of the male serrated or minutely pectinated; branches ciliated. Hind tibiæ incrassated. Wings with the three lines dark brown, zigzag, undulating, accompanied by very indistinct fawn-coloured bands; fourth or submarginal line almost obsolete; marginal points blackish; discal mark white, elevated, brown-bordered, dark brown on the under side, where the markings are much like those of *B. acaciaria*. Length of the body 7—8 lines; of the wings 16—20 lines.

*a.* Congo. Presented by Sir J. Richardson.

*b.* South Africa. Presented by Sir A. Smith.

## Group 3.

70. *BOARMIA DIVISARIA*.

**Fœm.** *Cinereo-cervina; thorax nigricante fasciatus; tibiæ posticæ vix incrassatæ; alæ subdentatæ, fusco conspersæ, lineis interiore et exteriori nigricantibus undulatis angulatis, spatio intermedio lineaque submarginali angulosa pallide cinereis, lunulis marginalibus nigris, litura discali supra obsoleta subtus fusca.*

**Female.** Cinereous fawn-colour. Thorax with an undulating blackish band. Hind tibiæ hardly incrassated. Wings slightly dentated, brown-speckled; interior and exterior lines slender, blackish, undulating, with several angles; intermediate space and zigzag submarginal line pale cinereous; marginal lunules black; discal mark obsolete above, brown and elongated on the under side, where the lines are very indistinct. Length of the body 8 lines; of the wings 22 lines.

• This species may be a *Tephrosia*.

*a.* Port Natal. From M. Gueinzus' collection.

## Group 4.

## 71. BOARMIA EXTREMARIA.

**Fœm.** *Viridescence-cinerea, fusco conspersa; tibiæ posticæ non incrassatæ; alæ breviusculæ, latiusculæ, subdentatæ, lineis interiore et exteriori fusciscentibus dentatis indistinctis ex parte obsoletis apud venas fusco punctatis, linea submarginali angulosa pallide cinerea, punctis marginalibus nigris, litura discali supra obsoleta subtus parva fusca.*

**Female.** Greenish cinereous, minutely brown-speckled. Hind tibiæ not incrassated. Wings very slightly dentated, rather short and broad; interior and exterior lines brownish, dentated, indistinct, partly obsolete, forming dark brown dots on the veins; submarginal line pale cinereous, zigzag; marginal points black; discal mark obsolete above, small and brown beneath, where there is a brown submarginal band, the latter dilated in the fore wings. Length of the body 6 lines; of the wings 15 lines.

This species recedes still more than *B. divisaria* from the typical form of the genus.

**a.** Port Natal. From M. Gueinzus' collection.

## 72. BOARMIA CONTEMPTARIA.

**Fœm.** *Cinereo-cervina, fusco conspersa; tibiæ posticæ subincrassatæ; alæ breviusculæ, latiusculæ, lineis interiore et obscuriore angulatis obscure fuscis, hac flexa, linea submarginali fusca angulosa, litura discali supra obsoleta subtus fusca.*

**Female.** Cinereous fawn-colour, brown-speckled. Hind tibiæ slightly incrassated. Wings rather short and broad; interior and exterior lines dark brown, angular, the latter bent; submarginal line brown, zigzag, less distinct; discal mark obsolete above, brown and distinct on the under side, where the lines are nearly obsolete. Length of the body 5 lines; of the wings 12 lines.

**a.** South Africa. Presented by Sir A. Smith.

## Group 5.

73. *BOARMIA SPOLIATARIA*.

**Mas et fœm.** *Albido-cinerea; antennæ maris ciliato serratæ; tibiæ posticæ incrassatæ; alæ fuscescente conspersæ, lineis tribus fuscis denticulatis ex parte obsoletis, linea submarginali alba angulosa, punctis marginalibus fuscis, litura discali fasciæque submarginali, subtus fuscis.*

**Male and female.** Whitish cinereous. Antennæ of the male serrated, ciliated. Hind tibiæ incrassated. Wings speckled with pale brown; interior, middle and exterior lines brown, denticulated, here and there obsolete, darkest on the veins, dilated on the costa of the fore wings; submarginal line white, zigzag; marginal points dark brown; under side with a brown discal mark and a brown submarginal band, which is excavated on the outer side and is obsolete hindward. Length of the body 4—4½ lines; of the wings 9—10 lines.

**a, b.** South Africa. Presented by Sir A. Smith.

74. *BOARMIA EXIGUARIA*.

**Fœm.** *Pallide flavescens-cinerea, nigro conspersa; caput nigricante-fuscum; tibiæ posticæ incrassatæ; alæ lineis tribus nigricante-fuscis denticulatis vix undulatis, linea submarginali angulosa pallide cinerea, punctis marginalibus punctoque discali nigris.*

**Female.** Pale yellowish cinereous, minutely black-speckled. Head above blackish brown. Hind tibiæ incrassated. Wings with the interior, middle and exterior lines blackish brown, denticulated, hardly undulating; submarginal line pale cinereous, zigzag; marginal points and discal point black; under side much like the upper side, but with less distinct lines. Length of the body 3½ lines; of the wings 9 lines.

**a.** South Africa. Presented by Sir A. Smith.

## Asia.

The Asiatic species form five groups; the first belongs to the first European group; the second belongs to the third European group, and the other three are somewhat aberrant from the typical structure of the genus.

## Group 1.

- A. Alæ carneo variæ. - - - - - suasaria, *Guen.*  
 B. Alæ carneo non variæ.  
 A. Alæ anticæ plagis pallidis. - - - - - admissaria, *Guen.*  
 B. Alæ plagis nullis pallidis.  
 A. Alæ fasciis flavescentibus. - - - - - Carinenta, *Cram.*  
 B. Alæ fasciis nullis flavescentibus.  
 a. Alæ latæ. - - - - - imparata, *Walk.*  
 b. Alæ non latæ.  
 i. Alæ fasciis bene determinatis. - - - - - Suiasasa, *Walk.*  
 ii. Alæ fasciis non bene determinatis.  
 \* Alæ albæ.  
 † Alæ litura discali supra conspicua.  
 † Alæ linea media lata. - - - - - processaria, *Walk.*  
 †† Alæ linea media non bene determinata.  
 § Alæ posticæ linea exteriori denticulata.  
 alienaria, *Walk.*  
 §§ Alæ posticæ linea exteriori non denticulata. - - - - - vicaria, *Walk.*  
 †† Alæ litura discali supra non conspicua.  
 raptaria, *Walk.*  
 \*\* Alæ non albæ.  
 † Alæ lineis non valde obliquis.  
 † Alæ amplæ. - - - - - recursaria, *Walk.*  
 †† Alæ non amplæ.  
 § Statura gracilis. - - - - - procursaria, *Walk.*  
 §§ Statura robusta.  
 → Alæ lineis latiusculis.  
 properata, *Walk.*  
 →→ Alæ lineis angustis.  
 ↔ Alæ obscuræ.  
 ↯ Alæ lineis denticulatis.  
 repulsaria, *Walk.*  
 ↯ Alæ lineis vix denticulatis.  
 injectaria, *Walk.*  
 +++++ Alæ pallidæ. invectaria, *Walk.*  
 †† Alæ lineis valde obliquis. - - - - - concursaria, *Walk.*

## 75. BOARMIA ADMISSARIA.

*Flavescente-cinerea; alæ nebulosæ, lunulis marginalibus nigris, fimbria nigricante varia; anticæ productæ, plagis duabus*

*discalibus pallidis, 2a majori postica, lineis interiore et exterioriore indistinctis, linea submarginali pallida angulosa; postica lineis tribus parallelis.*

*Boarmia admissaria*, Guen. *Phal.* i. 239, 357.

North Hindostan.

#### 76. BOARMIA CARINENTA.

*Cinerea; alæ dentatæ nigro conspersæ, fasciis plurimis flavescentibus, linea exteriori nigra valde dentata; anticæ linea interiori dentata maculaque discali nigris.*

*Phalæna Carinenta*, Cram. *Pap. Exot.* ii. 47, pl. 128, f. C.

*Phalæna Carinata*, Fabr. *Sp. Ins.* ii. 255, 78; Munt. *Ins.* ii. 196, 118; Ent. *Syst.* iii. 169, 146.

*Dryocoetis Carinentaria*, Hübn. *Verz. Schm.* 316, 3046.

*Phalæna-Geometra Carinenta*. Gmel. *ed. Syst. Nat.* i. 5, 2454, 634.

*Boarmia Carinentaria*, Guen. *Phal.* i. 240, 358.

Coromandel.

#### 77. BOARMIA SUASARIA.

*Obscure cinerascens; palpi ascendentes, arcuati; tibiæ posticæ incrassatæ, subarcuatæ, femoribus dimidio longiores; alæ carneo variæ, nigricante conspersæ, lineis indeterminatis nebulosis, umbra media magis conspicua, linea submarginali pallida dentata, subtus pallidissime cinereæ, macula discali lineæ media punctiformi margineque lato nigrificantibus.*

*Boarmia suasaria*, Guen. *Phal.* i. 243, 363.

Hindostan?

#### 78. BOARMIA ALIENARIA.

*Mas.*—*Albida, robusta, fusco conspersa; antennæ late pectinatæ, dimidio fere apicali filiformi; thorax et abdomen basi fusca fasciata; tibiæ posticæ valde incrassatæ; alæ fusco trifasciatæ, lineis interiore et exteriori nigris angulosis, linea submarginali albida angulosa, lunulis marginalibus nigris, litum discali alba tridentata nigro marginata; anticæ striga discali exteriori nigricante.* *Fœm.*—*Tibiæ posticæ vix incrassatæ; alæ fasciis subobsoletis.*

*Male.*—Whitish, stout, thickly speckled with brown. Antennæ broadly pectinated to a little more than half the length. A brown

black-bordered band on the thorax and another on the abdomen near the base. Hind tibiae very much incrassated. Wings with three brown bands, one basal, the other two between the exterior line and the border; interior and exterior lines black, zigzag, the former obsolete in the hind wings, the latter bent towards the costa in the fore wings; submarginal line whitish, zigzag; marginal lunules black; discal mark white, black-bordered, tridentate and connected with a small black-bordered mark on the inner side; under side with a large discal spot; a slight exterior line and an excavated marginal band dark brown. Fore wings with a blackish streak, which proceeds from the discal mark and traverses the exterior line. *Female*.—Hind tibiae hardly incrassated. Wings with the brown bands mostly obsolete. Length of the body 6—7 lines; of the wings 16—18 lines.

This species seems to be distinct from *B. admissaria*, by which name it is mentioned in Sir J. E. Tennent's 'History of Ceylon.'

Silhet.

b. Ceylon. Presented by Dr. Templeton.

#### 79. BOARMIA VICARIA.

*Fœm.* *Albida, fusco subconspersa; tibiæ posticæ vix incrassatæ; alæ fasciis tribus ferrugineis interruptis, lineis interiore et media indistinctis, linea exteriori nigra angulata flexa, linea submarginali alba angulosa, punctis marginalibus nigris elongatis, macula discali fasciaque lata submarginali subtus obscure fuscis; anticæ litura discali alba; posticæ litura discali cinerea fusco conspersa.*

*Female*. Whitish. Hind tibiae hardly incrassated. Wings lightly brown-speckled, with three very incomplete ferruginous bands; interior and middle lines indistinct; exterior line black, angular, bent; submarginal line white, zigzag, most distinct in the fore wings; marginal points black, elongated; under side with a discal spot and a broad submarginal band dark brown, the latter including a white apical spot. Fore wings with the discal mark white, elevated, slightly and incompletely brown-bordered. Hind wings with the discal mark very distinctly brown-bordered; its disk cinereous, brown-speckled. Length of the body 7 lines; of the wings 18 lines.

This species is closely allied to *B. alienaria*, but may be dis-

tinguished by the exterior line of the hind wings, which has fewer angles, and is very near to the discal mark.

*a.* Silhet. Presented by E. Doubleday, Esq.

#### 80. BOARMIA PROCESSARIA.

**Fœm.** *Albido-cinerea, fusco\*conspersa; abdomen fascia basali alba nigricante marginata; tibiæ posticæ incrassatæ; alæ fasciis ferrugineis valde incompletis, lineis nigricantibus, linea media latissima optime determinata, linea submarginali alba angulosa, lunulis marginalibus nigris, litura discali nigricante albo squamosa; anticæ subtus fascia submarginali dilatata lituraque discali maxima.*

**Female.** Whitish cinereous, brown-speckled. Abdomen with a white blackish-bordered band at the base and with blackish bands on the hind borders of the segments. Hind tibiæ incrassated. Wings with blackish lines, which are accompanied by very incomplete ferruginous bands; middle line very broad and distinct, very slightly undulating, bent in the fore wings along the outer side of the discal mark; exterior line more undulating, slightly dentate; submarginal line white, zigzag; marginal lunules black; discal mark blackish, irregular, with white scales in the disk; under side with white marginal spots, with a blackish discal spot (which is very large in the fore wings), with brown middle and exterior lines, and with a submarginal band, which is much dilated in the fore wings, where it extends to the exterior line. Fore wings with a broad blackish streak, which extends from the discal mark to the exterior border. Length of the body 6 lines; of the wings 17 lines.

Closely allied to the two preceding species.

*a.* Hindostan. From Archdeacon Clerk's collection.

#### 81. BOARMIA IMPARATA.

**Fœm.** *Albido-cinerea, robusta, testaceo suffusa, fusco conspersa; alæ latæ, fasciis fuscis diffusis incompletis, lineis tribus nigricantibus dentatis subundulatis, linea submarginali albida angulosa, punctis marginalibus nigris elongatis; anticæ litura discali maxima tridentata nigricante marginata, macula subtus apicali albida.*



**Female.** Whitish cinereous, testaceous-tinged, brown-speckled, very stout. Hind tibiae incrassated. Wings broad, with incomplete and diffuse brown bands, which accompany the lines; interior, middle and exterior lines blackish, dentate, slightly undulating; submarginal line whitish, zigzag, not distinct; marginal points black, much elongated; discal mark distinct, blackish-bordered, tridentate and very large in the fore wings, wholly blackish on the under side, where the usual whitish apical spot excavates the much abbreviated dark brown marginal band. Length of the body 8 lines; of the wings 20 lines.

This species in the breadth of its wings resembles the genus *Hypochroma*.

**a. Nepaul.** Presented by Major-Gen. Hardwicke.

## 82. BOARMIA RAPTARIA.

**Fœm.** *Alba, fusco conspersa; thorax nigro fasciatus; abdomen basi guttis lateralibus nigris; tibiæ posticæ incrassatæ; alæ flavescente vix tinctæ, lineis interiore et exteriori fuscis dentatis, hac undulata duplicata, linea submarginali vix conspicua, punctis marginalibus nigris, litura discali supra obsoleta subtus fusca bene determinata.*

**Female.** White, brown-speckled. Thorax with an abbreviated black band in front. Abdomen towards the base with lateral black dots. Hind tibiae incrassated. Wings with a very slight yellowish tinge; interior and exterior lines brown, dentate, remote from each other; the former obsolete in the hind wings; the latter undulating, double, bent towards the costa in the fore wings; submarginal line indistinctly marked in brown; marginal points black; discal mark obsolete above, brown beneath, where it is very large in the fore wings; submarginal band beneath almost obsolete, except towards the costa of the fore wings. Length of the body 6 lines; of the wings 18 lines.

**a. Ceylon.** Presented by Dr. Templeton.

## 83. BOARMIA SUIASASA.

**Mas.** *Albida, fusco conspersa vix testaceo suffusa; palpi ascendentes; antennæ ciliato serratæ; thorax fusco fasciatus; tibiæ posticæ incrassatæ; alæ fasciis duabus fuscis dentatis*

*undulatis optime determinatis, lineis interiore et exteriori nigricantibus, linea submarginali obsoleta, punctis marginalibus nigris, litura discali subtus fusca; anticae plaga apicali subtus fusca.*

**Male.** Whitish, brown-speckled, hardly testaceous-tinged. Palpi ascending. Antennæ serrate except towards the tips, with ciliate branches. Thorax with a brown band in front. Hind tibiæ incrassated. Wings with two very distinct undulating dentate brown bands, which accompany the interior and exterior blackish lines; middle line slender, angular, obsolete in the hind wings; submarginal line obsolete; marginal points black; discal mark obsolete above, brown beneath, where the exterior line is also visible and joins the large apical brown patch. Length of the body 5 lines; of the wings 14 lines.

**a. Ceylon.** Presented by Dr. Templeton.

#### 84. BOARMIA REPULSARIA.

**Mas.** *Fusca, subtus albedo-cinerea; antennæ late pectinatæ, apices versus simplices; tibiæ posticæ valde incrassatæ; alæ cinereæ, subhyalinæ, fasciis diffusis fuscis, lineis interiore et exteriori dentatis nigricantibus, linea submarginali cinerea angulosa indistincta, litura discali fusco diffuse marginata, maculis subtus quatuor marginalibus albidis.*

**Male.** Brown, whitish cinereous beneath. Antennæ broadly pectinated to much beyond half the length. Hind tibiæ much incrassated. Wings cinereous, slightly hyaline, mostly occupied by diffuse brown bands; interior and exterior lines blackish, dentate; submarginal line cinereous, zigzag, indistinct; discal mark diffusely bordered with brown; under side with a large discal brown spot and with a marginal brown band, which is excavated by two whitish spots in each wing. Length of the body 6 lines; of the wings 16 lines.

**a. Hong Kong.** Presented by Major Champion.

#### 85. BOARMIA RECURSARIA.

**Fœm.** *Cinereo-fusca; tibiæ posticæ subclavatæ; alæ amplæ, subhyalinæ, fusco subconspersæ, lineis interiore et exteriori nigricantibus undulatis dentatis, linea submarginali valde indistincta, litura discali fuscescente diffusa; antica subtus linea exteriori maculaque costali subapicali fuscis.*

**Female.** Cinereous-brown, cinereous beneath. Hind tibiae subclavate. Wings ample, slightly hyaline, minutely brown-speckled; interior and exterior lines blackish, undulating, dentate, indistinct in the hind wings; submarginal line very indistinct; discal mark brownish, diffuse, indistinct, more distinct on the under side, where the fore wings have an exterior line and a brown costal subapical spot. Length of the body 7 lines; of the wings 20 lines. Central Hindostan. In Mr. Saunders' collection.

## 86. BOARMIA PROCURSARIA.

**Mas.** *Fuscescente-cinerea, gracilis, subtus albida; antennae dense pectinatae, apice filiformes; tibiae posticae subincrassatae; alae fusco subconspersae, lineis tribus nigricantibus denticulatis undulatis, linea submarginali cinerea angulosa; anticae subtus macula costali subapicali fusca; posticae litura discali annuliformi.*

**Male.** Brownish cinereous, slender, whitish beneath. Antennae densely pectinated to beyond two-thirds of the length. Hind tibiae slightly incrassated. Wings minutely brown-speckled; interior, middle and exterior lines blackish, denticulated, undulating; middle line more diffuse than the others, interrupted in the fore wings; submarginal line cinereous, zigzag, here and there distinct; discal mark most distinct in the hind wings, where it forms a complete ringlet; under side with the discal mark largest in the fore wings, which have a brown costal subapical spot. Length of the body 5 lines; of the wings 14 lines.

**s. Hindostan.** From Archdeacon Clerk's collection.

## 87. BOARMIA INVECTARIA.

**Mas.** *Subcervino-cinerea; antennae late pectinatae, apice filiformes; tibiae posticae valde incrassatae; alae subhyalinae, lineis interiore et exteriori fuscis denticulatis indistinctis, fasciis cervinis subobsoletis, punctis marginalibus fuscis; anticae subtus apices versus fuscae, macula apicali albida.*

**Male.** Cinereous, tinged with pale fawn-colour. Antennae broadly pectinated to much beyond half the length. Hind tibiae much incrassated. Wings slightly hyaline; interior and exterior lines brown, denticulated, indistinct, accompanied by nearly obsolete fawn-coloured bands; middle line, submarginal line and discal

mark still more indistinct; marginal points brown; under side with a brown discal mark, which is very small in the hind wings, and with some traces of the submarginal band, which is distinct, towards the costa of the fore wings, where it encloses the whitish apical spot. Length of the body  $4\frac{1}{2}$  lines; of the wings 12 lines.

a. Punjaub. Presented by Gen. Hearsay.

### 88. BOARMIA PROPERATA.

**Mas.** *Cinereo-fusca, robusta; antennæ subpectinatae, dimidio apicali filiformi; abdomen basi obscure fuscum; tibiæ posticae non incrassatae; alæ fusco conspersæ, lineis interiore et exteriori distinctis nigricantibus undulatis denticulatis, spatio intermedio ex parte cinereo, linea submarginali pallida subobsoleta, punctis marginalibus nigris, litura discali fusca, maculis subtus quatuor marginalibus albidis.*

**Male.** Cinereous-brown, stout. Antennæ slightly pectinated to about half the length. Abdomen dark brown at the base. Hind tibiæ not incrassated. Wings brown-speckled; interior and exterior lines distinct, blackish, undulating, denticulated; space between them partly cinereous; submarginal line pale, almost obsolete; marginal points black; discal mark large, brown, darker on the under side, where there are four whitish marginal spots. Length of the body 5 lines; of the wings 14 lines.

a. North Hindostan. From Mr. James' collection.

### 89. BOARMIA INJECTARIA.

**Fœm.** *Cinereo-fusca; tibiæ posticae subincrassatae; alæ fusco conspersæ, lineis interiore et exteriori nigricantibus undulatis angulatis, linea submarginali pallida indistincta, punctis marginalibus nigris, litura discali cinerea tridentata, fascia subtus marginali e maculis albidis excavata.*

**Female.** Cinereous-brown. Hind tibiæ slightly incrassated. Wings brown-speckled; interior and exterior lines blackish, undulating, angular; submarginal line pale, indistinct; marginal points black; discal mark cinereous, tridentate, brown-bordered, wholly brown on the cinereous under side, where the marginal brown band is excavated by whitish spots. Length of the body 5 lines; of the wings 15 lines.

a. Ceylon. From the Rev. J. Wenham's collection.

## 90. BOARMIA CONCURSARIA.

**Fœm.** *Cinereo-fusca; tibiæ posticæ subincrassatæ; alæ elongatæ, fusco conspersæ, lineis interiore et exteriori obscure fuscis approximatis valde obliquis, linea submarginali cinerea angulosa fusco submarginata, lunulis marginalibus obscure fuscis, litura discali fasciæque submarginali subtus fuscis; anticæ subtus macula apicali maculisque duabus costalibus fuscis.*

**Female.** Cinereous-brown, pale cinereous beneath. Oviduct exerted. Hind tibiæ slightly incrassated. Wings elongated, brown-speckled; interior and exterior lines dark brown, approximate, very oblique, the latter acutely angular towards the costa of the fore wings; submarginal line cinereous, zigzag, slightly brown-bordered; marginal lunules dark brown; discal mark obsolete above, large and brown beneath, where there is a submarginal brown band. Fore wings beneath with a whitish apical spot, and two brown costal spots, of which the second is subapical and larger than the other. Length of the body 6 lines; of the wings 16 lines.

**a.** North Hindostan. From Mr. James' collection.

## Group 2.

**A.** Alæ albæ aut cineræ.

**A.** Alæ anticæ litura discali nigricante. - cornaria, Guen.

**B.** Alæ anticæ litura discali non nigricante.

**A.** Alæ litura discali parva. - - - sublavaria, Guen.

**B.** Alæ litura discali sat magna.

**a.** Alæ anticæ vix productæ. - - trispinaria, Walk.

**b.** Alæ anticæ productæ.

**i.** Alæ anticæ striga nulla.

\* Alæ litura discali angulata. - promptaria, Walk.

\*\* Alæ litura discali non angulata. - infixaria, Walk.

**ii.** Alæ anticæ striga discali. - - transcissa, Walk.

**B.** Alæ fuscescentes.

**A.** Alæ non vittatæ. - - - reparaata, Walk.

**B.** Alæ vitta communi. - - - separata, Walk.

This group is rather heterogeneous, and will form sub-groups.

**B. transcissa** is nearly allied to *B. concursaria* in the first group.

## 91. BOARMIA CORNARIA.

**Mas.** *Alba; antennæ longissimæ, dimidio fere apicali filiformi; tibiæ posticæ incrassatæ; alæ cinereo conspurcatæ, lineis duabus angustis dentatis; anticæ litura discali magna ovali nigricante-cinereo subnotata, plaga subtus apicali maculam pallidam quadratam includente; posticæ basi pallidiores.*

*Boarmia cornaria*, Guen. *Phal.* i. 254, 390.

North Hindostan.

## 92. BOARMIA SUBLAVARIA.

*Albida; alæ cinereo conspersæ, lineis duplicatis punctatis undulatis angulosis fusco-cinereis, puncto discali punctisque marginalibus fuscis, subtus cinereæ albo marginatæ macula discali atra fascia submarginali nigra.*

*Boarmia sublavaria*, Guen. *Phal.* i. 256, 393.

a, b. Silhet. Presented by E. Doubleday, Esq.

c. Silhet. From Mr. Stainforth's collection.

d. Silhet. From Mr. Sowerby's collection.

e, f. Hindostan. From the collection of the Entomological Society.

g. Hindostan. From Archdeacon Clerk's collection.

h. Ceylon. Presented by Dr. Templeton.

i. Ceylon. From Mr. Stevens' collection.

## 93. BOARMIA TRISPINARIA.

**Mas et fœm.** *Albido-cinerea, gracilis; antennæ maris late pectinata, apice simplices; abdomen guttis lateralibus fuscis; tibiæ posticæ vix incrassatæ; alæ latæ, fusco conspersæ, lineis interiore et exteriori fuscis angulosis undulatis, linea submarginali albida angulosa fusco submarginata, punctis marginalibus nigricantibus, litura discali tridentata fusco marginata.*

*Male and female.* Whitish cinereous, slender. Antennæ of the male broadly pectinated, except at the tips. Abdomen with two rows of brown dots. Hind tibiæ hardly incrassated. Wings broad, brown-speckled; interior and exterior lines brown, zigzag, undulating; middle line less distinct; submarginal line whitish, zigzag, partly and diffusedly bordered with brown; marginal points blackish; discal mark brown-bordered, tridentate, brown beneath, where it is obsolete in the hind wings of the male, and

very small in those of the female; under side whitish, with a brown submarginal band, which is dilated in the fore wings, and is abbreviated hindward. Length of the body 7—8 lines; of the wings 18—20 lines.

a. Hindostan. From the collection of the Entomological Society.

b. North Hindostan. From Mr. James' collection.

c—e. Silhet. Presented by E. Doubleday, Esq.

f, g. Silhet. From Mr. Sowerby's collection.

#### 94. BOARMIA PROMPTARIA.

**Fœm.** *Subcervino-cinerea, fusco conspersa; thorax fusco fasciatus; tibiæ posticæ subincrassatæ; alæ elongatæ, lineis interiore et exteriori nigricantibus angulosis vix undulatis, fasciis fuscis indistinctis, linea submarginali valde indistincta fusco ex parte nebulosa, punctis marginalibus nigris, litura discali cinerea tridentata nigricante marginata.*

**Female.** Cinereous, brown-speckled, slightly tinged with fawn-colour. Thorax with a brown band in front. Hind tibiæ slightly incrassated. Wings elongate; interior and exterior lines blackish, zigzag, hardly undulating, accompanied by indistinct brown bands; submarginal line very indistinct, partly shaded with brown; marginal points black; discal mark cinereous, tridentate, blackish-bordered; under side whitish cinereous, with a large blackish discal spot and with an exterior line, the submarginal band very slight and incomplete, except towards the costa of the fore wings. Length of the body 6—7 lines; of the wings 16—18 lines.

This species may be distinguished from *B. trispinaria* by its narrower fore wings, which have a much more oblique exterior border.

a. Hindostan. From the collection of the Entomological Society.

#### 95. BOARMIA INFIXARIA.

**Mas.** *Cervino-cinereus, fusco conspersus; tibiæ posticæ valde incrassatæ; alæ lineis interiore et exteriori fuscis denticulatis sat obliquis, linea media minus determinata, linea submarginali valde indistincta fuscescente nebulosa, litura discali cinerea fusco diffuse marginata subtus magna nigricante, fascia submarginali subtus fusca integra.*

*Male.* Cinereous, tinged with fawn-colour, thickly and minutely brown-speckled. Hind tibiæ much incrassated. Wings moderately broad; interior and exterior lines brown, denticulate, rather oblique, the latter bent towards the costa of the fore wings; middle line less distinct; submarginal line very indistinct, shaded with pale brown; discal mark cinereous, diffusedly bordered with brown; under side pale cinereous, with a large blackish discal spot, and with a brown complete submarginal band; exterior line also visible. Length of the body 6 lines; of the wings 16 lines.

a. North Hindostan. From Mr. James' collection.

#### 96. BOARMIA TRANSCISSA.

*Mas.* *Cinerea, gracilis, fusco conspersa; antennæ late pectinatæ; tibiæ posticæ valde incrassatæ; thorax et abdomen fusco fasciata; alæ fasciatæ, lineis interiore et exteriori nigricantibus denticulatis subundulatis, linea submarginali pallida angulosa fusco marginata, lunulis marginalibus nigricantibus, litura discali elongata marginata; anticæ striga fusca.*

*Male.* Cinereous, slender, brown-speckled. Antennæ thickly and broadly pectinated, except towards the tips. Hind tibiæ very much incrassated. A brown band on the thorax, and one on the hind border of each of the abdominal segments. Wings moderately broad; interior and exterior lines blackish, denticulated, slightly undulating, accompanied by parallel bands, the latter bent and acutely angular towards the costa of the fore wings; submarginal line pale, zigzag, very distinct, brown-bordered; marginal lunules blackish; discal mark forming an elongated brown-bordered ringlet, the latter almost wholly brown beneath, where the broad brown marginal band is diffuse on the inner side. Fore wings with a brown streak, which traverses the exterior line. Length of the body 6 lines; of the wings 16 lines.

a. Silhet. From the Rev J. Stainforth's collection.

#### 97. BOARMIA REPARATA.

*Mas et fœm.* *Cervino-cinerea, fusco dense conspersa; antennæ maris late pectinatæ; tibiæ posticæ incrassatæ; alæ latiusculæ, lineis interiore et exteriori nigricantibus denticulatis, linea submarginali pallida angulosa fusco submarginata, punctis marginalibus obscure fuscis, litura discali supra obsoleta subtilus distincta; anticæ macula apicali albida.*



*Male and female.* Cinereous, more or less tinged with fawn-colour, thickly covered with brown speckles, which are here and there confluent. Antennæ of the male broadly pectinated, except at the tips. Hind tibiæ incrassated. Wings rather broad; interior and exterior lines blackish, irregular, denticulated, dilated on the costa of the fore wings; submarginal line pale, zigzag, diffusedly and incompletely bordered with brown; marginal points dark brown; discal mark obsolete above, apparent beneath, except on the hind wings of the male; under side with an exterior line and a complete submarginal brown band, which in the fore wings is excavated by a whitish apical spot. Length of the body 7 lines; of the wings 16—17 lines.

a, b. Silhet. Presented by E. Doubleday, Esq.

c. Silhet. From Mr. Stainforth's collection.

#### 98. BOARMIA SEPARATA.

*Mas.* *Cervina, gracilis; antennæ late pectinatæ; tibiæ posticæ incrassatæ; alæ fusco conspersæ, fascia communi lata fusca, lineis interiore et exteriori fuscis denticulatis, linea submarginali obsoleta, litura discali indistincta subtus conspicua, fascia submarginali subtus integra; posticæ fascia postica angusta fusca.*

*Male.* Fawn-colour, slender. Antennæ broadly pectinated, except towards the tips. Hind tibiæ incrassated. Wings brown-speckled, with a broad irregular brown band, which occupies the hind part of the fore wings and the fore part of the hind wings, and is formed of confluent speckles, and partly obliterates the brown denticulated interior and exterior lines; submarginal line obsolete; discal mark indistinct, conspicuous and annuliform beneath, where the exterior line and the submarginal band are also distinct and complete. Hind wings with a narrow brown band towards the exterior border. Length of the body  $6\frac{1}{2}$  lines; of the wings 15 lines.

a. Hindostan. From the collection of the Entomological Society.

#### Group 3.

#### 99. BOARMIA BHURMITRA

*Fem.* *Ochraceo-cinerea, robusta, subtus albido-cinerea; tibiæ posticæ subincrassatæ; alæ amplæ, nebulosæ, lineis denticulatis*

*pallide fuscescentibus valde indistinctis, linea submarginali pallida angulosa, punctis marginalibus obscure fuscis, litura discali obsoleta.*

*Female.* Ochraceous-cinereous, stout, whitish cinereous beneath. Oviduct exerted. Hind tibiæ slightly incrassated. Wings ample, clouded; lines pale brownish, denticulated, very indistinct; submarginal line pale zigzag; marginal points dark brown; discal mark obsolete; under side without markings, except a very indistinct submarginal band. Length of the body 7 lines; of the wings 20 lines.

*a. Ceylon.* Presented by Dr. Templeton.

#### 100. BOARMIA INCONCLUSA.

*Mas.* Cinereo-testacea, fusco conspersa, subtus albida; antennæ subpectinatae, triente apicali filiformi; alæ latiusculæ, non longæ, olivaceo vix nebulosæ, lineis denticulatis fusco notatis, lunulis marginalibus obscure fuscis, litura discali lunata fasciæque submarginali lata subtus fuscis.

*Male.* Cinereous-testaceous, stout, brown-speckled, whitish beneath. Antennæ slightly pectinated to two-thirds of the length. Wings rather broad, not long, very slightly clouded with olivaceous-green; speckles here and there confluent; lines denticulated, very incomplete, chiefly indicated by dark brown streaks on the veins; marginal lunules dark brown; under side with a lunate brown discal mark, and with a broad submarginal brown band. Length of the body 6 lines; of the wings 16 lines.

This species has some resemblance to the *Hypochromæ*.

*a. Silhet.* From Mr. Sowerby's collection.

#### Group 4.

#### 101. BOARMIA DIFFUSARIA.

*Mas.* Cinereo-cervina, subtus albido-cinerea; antennæ vix pectinatae; tibiæ posticæ incrassatæ; alæ robustæ, brevisculæ, lineis fuscescentibus valde indistinctis, linea exteriori nigricante notata, linea submarginali pallida angulosa, lunulis marginalibus obscure fuscis, litura discali obsoleta.

*Male.* Cinereous fawn-colour, moderately stout, whitish cinereous beneath. Antennæ hardly pectinated. Hind tibiæ incrassated. Wings stout, rather short, moderately broad; lines brownish,

very indistinct; interior line almost obsolete; exterior line forming blackish marks on the veins; submarginal line pale, zigzag, partly bordered and distinguished by confluent brown speckles; marginal lunules dark brown; discal mark obsolete; under side without any markings. Length of the body 5 lines; of the wings 14 lines.

This species may be a *Tephrosia*.

a. Punjaub. Presented by General Hearsay.

### Group 5.

#### 102. BOARMIA CESSARIA.

**Mas.** *Testacea, gracilis; caput obscure fuscum; antennæ ciliato-serratae; abdomen fuscum; alæ obscure fuscae, apud margines testaceo conspersæ, lineis tribus indistinctis diffusis obscure fuscis, linea submarginali lituraque discali obsoletis; posticæ vitta postica pallida non conspersa.*

**Male.** Testaceous, slender. Head and palpi dark brown, the latter ascending. Antennæ ciliate-serrate, except towards the tips. Abdomen brown, except at the base. Wings mostly but irregularly dark brown, the speckles being confluent; a pale space without speckles about the hind part of the exterior border of the hind wings; three indistinct somewhat diffuse dark brown lines; submarginal line and discal mark obsolete; under side with a dark brown discal spot, and with two brown lines, the space beyond the exterior line mostly brown. Length of the body 6 lines; of the wings 17 lines.

Ceylon. In Mr. Saunders' collection.

### Australasia.

The four first of the eight following species belong to the first European group; the fifth belongs to the third European group; the sixth is nearly allied to *B. separata*; the seventh and the eighth form two abnormal groups of the genus.

### Group 1.

#### 103. BOARMIA COSTARIA.

**Mas.** *Cinereo-ferruginea; antennæ late pectinatae, apicæ filiformes; tibiæ posticæ valde incrassatae; alæ lineis interiore et exte-*

*riore nigricantibus denticulatis undulatis, hac bene determinata  
linea submarginali pallida angulosa fuscescente marginata.*

*Boarmia costaria*, Guen. *Phal.* i. 242, 361.

a. Sarawak, Borneo. From Mr. Wallace's collection.

#### 104. *BOARMIA DECURSARIA.*

*Mas. Alba, fusco nigroque conspersa; antennæ late pectinatae; thorax antice candidus; tibiæ posticæ incrassatæ; alæ lineis interiore et exteriori nigris, linea submarginali fusca valde incompleta, punctis marginalibus nigris; anticæ elongatæ, margine exteriori perobliquo.*

*Male.* White, brown and black-speckled. Antennæ broadly pectinated. Thorax pure white in front. Hind tibiæ incrassated. Wings with the interior and exterior lines black, the latter more distinct than the former, and slightly bordered with testaceous; submarginal line brown, very incomplete; marginal points black; discal mark almost obsolete, as are also the markings beneath. Fore wings elongate, most speckled towards the costa; exterior border very oblique. Length of the body 7 lines; of the wings 16 lines.

This species very much resembles *B. raptaria*.

Sarawak, Borneo. In Mr. Saunder's collection.

#### 105. *BOARMIA DETERMINATA.*

*Mas. Alba, robusta, fusco subconsersa; antennæ late pectinatae, apice filiformes; thorax fusco bifasciatus; abdomen nigro punctatum; tibiæ posticæ incrassatæ; alæ fusco fasciatæ, lineis interiore et exteriori nigricantibus denticulatis, linea submarginali alba angulosa; anticæ annulo discali nigricanti maxima.*

*Male.* White, stout, slightly speckled with brown. Antennæ broadly pectinated to much beyond half the length. Thorax with two slight brown bands. Abdomen with two rows of black points. Hind tibiæ incrassated. Wings with the interior and exterior lines blackish, denticulated, the latter most distinct, both accompanied by brown bands; space between the outer band and the exterior border mostly occupied by an irregular band, which includes the white zigzag submarginal line; marginal lunules blackish; discal mark blackish-bordered, very large and conspicuous in the fore

wings, wholly brown on the under side, where there is a very broad brown band, which is slightly excavated along the border. Length of the body 7 lines; of the wings 18 lines.

This is very nearly allied to *B. alienaria*, and the two may be considered as sub-species.

a. Sarawak, Borneo. From Mr. Wallace's collection.

#### 106. BOARMIA PROPULSARIA.

**Mas.** *Cinerea, robusta; antennæ latissime pectinatæ, apice simplices; thorax fuscescente fasciatus; abdomen fuscescens, segmentis albido marginatis; tibiæ posticæ valde incrassatæ; alæ apud discum subhyalinæ, lineis interiore et exteriori denticulatis fascisque indeterminatis fuscis, spatio marginali fuscescente lineam submarginalem pallidam angulosam includente.*

**Male.** Cinereous, stout, tinged with fawn-colour. Antennæ very broadly pectinated to much beyond half the length. Thorax with a brownish band. Abdomen brownish; hind borders of the segments whitish. Hind tibiæ much incrassated. Wings slightly hyaline, except towards the border; interior and exterior lines brown, denticulated, accompanied by irregular brown bands; marginal space brownish, including the pale cinereous zigzag submarginal line; marginal lunules dark brown; discal mark brown, with a cinereous streak in its disk, blackish beneath, where the wings are paler, with the exception of the broad submarginal band, which is excavated by whitish marginal spots in each wing.

**Female.**—Antennæ more slightly pectinated. Abdomen with interrupted blackish bands. Wings with blackish lines; marginal points deep black. Length of the body 6 lines; of the wings 11 lines.

a. Sarawak, Borneo. From Mr. Wallace's collection.

#### Group 2.

#### 107. BOARMIA DETRACTARIA.

**Mas.** *Albido-cinerea; caput fuscum; antennæ late pectinatæ; tibiæ posticæ valde incrassatæ; alæ breviusculæ, fusco conspersæ, lineis interiore et exteriori fuscis denticulatis, linea submarginali indistincta, punctis marginalibus nigris, annulo discali oblongo fusco-marginato, subtus sordide cinereæ.*

*Male.* Whitish cinereous. Head brown. Antennæ broadly pectinated, except towards the tips. Hind tibiæ much incrassated. Wings rather short, with brown speckles, which in a few places are confluent; interior and exterior lines brown, denticulated, darker and more distinct along the costa of the fore wings; submarginal line indistinct; marginal points black; discal ringlet oblong, brown-bordered; under side dingy cinereous, without lines, except an indistinct submarginal band. Length of the body 6—7 lines; of the wings 14—16 lines.

a. Sarawak, Borneo. In Mr. Wallace's collection.

### Group 3.

#### 108. BOARMIA RETRACTARIA.

*Mas.* *Flavescente-cinerea, gracilis, fusco conspersa; antennæ late pectinatæ; abdomen fusco fasciatum; tibiæ posticæ incrassatæ; alæ elongatæ, fusco ex parte suffusæ, lineæ exteriori denticulata annuloque discali nigricantibus, subtus cinereæ fascia submarginali fuscescente maculaque discali nigricante.*

*Male.* Yellowish cinereous, slender, brown-speckled. Antennæ broadly pectinated, except towards the tips. Abdomen with brown bands. Hind tibiæ incrassated. Wings elongated, with the brown speckles confluent on most of the surface; denticulated exterior line and discal ringlet blackish; under side cinereous, with a brownish cinereous submarginal band and a blackish discal spot. Length of the body 7 lines; of the wings 18 lines.

a. Sarawak, Borneo. From Mr. Wallace's collection.

### Group 4.

#### 109. BOARMIA INCURSARIA.

*Mas.* *Ferruginea, robusta; antennæ dense pectinatæ, apice simplices; thorax nigricante fasciatus; abdomen basi testaceo fasciatum; tibiæ posticæ valde incrassatæ; alæ fusco conspersæ, lineis interiore et exteriori nigris denticulatis, lineæ submarginali albida angulosa nigro ex parte marginata, litura discali indistincta; anticæ vitta discali nigra interrupta.*

*Male.* Ferruginous, stout. Antennæ densely pectinated to beyond two-thirds of the length. Thorax with a blackish band.

Abdomen with a testaceous band at the base. Hind tibiae very much incrassated. Wings minutely brown-speckled; interior and exterior lines black, denticulated, the former brown and somewhat diffuse in the hind wings; submarginal line whitish, zigzag, partly and slightly black-bordered; marginal points black; discal mark indistinct, blackish, and more conspicuous on the under side, where the markings are less visible. Fore wings with a black interrupted discal streak extending along the whole length of the wing; space between the interior and exterior lines mostly whitish, the latter very much bent. Length of the body 7 lines; of the wings 17 lines.

Sarawak, Borneo. In Mr. Saunders' collection.

### Group 5.

#### 110. BOARMIA DELINEATA.

*Fœm. Testacea, ferrugineo conspersa, sat gracilis; tibiæ posticæ subarcuatæ, non incrassatæ; alæ breviusculæ, latiusculæ, lineis interiore et exteriori fuscis dentatis gracillimis, spatio intermedio vix consperso, punctis marginalibus nigricantibus; antica linea exteriori costam versus valde flexa.*

*Female.* Testaceous, rather slender, ferruginous-speckled. Hind tibiae slightly bent, not incrassated. Wings rather short and broad; interior and exterior lines brown, dentate, very slender, the latter acutely and deeply bent towards the costa of the fore wings; space between the lines mostly without speckles; marginal points blackish; under side with a blackish discal point and a broad brown band, which is limited on the inner side by the exterior line, and is diffuse towards the border. Length of the body 5 lines; of the wings 14 lines.

This is a very aberrant form of the genus.

Sarawak, Borneo. In Mr. Saunders' collection.

### Australia.

The following fifteen species may be divided into five groups; the first group is peculiar to Australia; the second is placed by Guenée in the 3rd European group; the third may be joined to the first European group, and the fourth and fifth are formed of small species, which do not well accord with the typical structure of *Boarmia*.

## Group i.

## 111. BOARMIA BITÆNIARIA.

*Albido-cinerea, robusta; antennæ maris pectinatae, triente apicali filiformi; thorax nigro bifasciatus; tibiæ posticæ incrassatæ; alæ linea exteriori nigra dentata extus ferrugineo marginata; anticæ costa nigro strigata, fascia media lineisque ferrugineis.*

*Boarmia bitæniaria*, Le Guillou, *Rev. Zool. Guer.* 1841, 257.  
*Guen. Phal.* i. 249, 379, pl. 3, f. 1.

Australia.

## 112. BOARMIA CANESCARIA.

*Mas. Pallide cinerea, nigro conspersa; antennæ pectinatae; alæ lineis nigris cervino marginatis; anticæ maculis costalibus duabus duplicatis, lineis costam versus obsoletis.*

*Boarmia canescaria*, *Guen. Phal.* i. 249, 380.

Australia?

## 113. BOARMIA LYCIARIA.

*Fœm. Pallide cinerea, B. pœciliaris affinis, major; alæ magis dentatæ, nigro conspersæ, lineis nigris sat rectis.*

*Boarmia lyciaria*, *Guen. Phal.* i. 250, 381.

Tasmania.

## 114. BOARMIA PŒCILARIA.

*Albo-cinerea; alæ fusco (mas) aut cervino (fœm.) variæ, lineis interiore et exteriori nigris valde dentatis, linea submarginali alba; subtus testaceæ, macula discali fasciaque submarginali valde interrupta nigris; anticæ linea submarginali apud discum dilatata.*

*Boarmia pœcilaria*, *Guen. Phal.* i. 250, 382, pl. 6, f. 1.

*a—j.* Australia. Presented by Major-Gen. Hardwicke.

*k.* Tasmania. Presented by M. Allport, Esq.

*l.* Tasmania. From the collection of the Entomological Society.

*m.* Tasmania. From Mr. Smith's collection.

*n.* Tasmania. Presented by J. G. Children, Esq.



## 115. BOARMIA SEMITATA.

**Fœm.** *Cinerea, gracilis, fusco conspersa, vix testaceo suffusa; abdomen nigro fasciatum; tibiæ posticæ vix incrassatæ; alæ elongatæ, lineis interiore et exteriori nigris angustis undulatis perobliquis, linea submarginali angulosa pallide cinerea, litura discali parva angusta fusca; anticæ linea exteriori valde flexa.*

**Female.** Cinereous, slender, testaceous-tinged, brown-speckled. Hind tibiæ hardly incrassated. Abdomen with black bands. Wings elongate; interior and exterior lines black, slender, undulating, very oblique, the latter deeply angular and much bent in the fore wings; submarginal line pale cinereous, zigzag; marginal points black; discal mark narrow, brown, distinct also on the under side, where there is a brown submarginal band. Length of the body  $5\frac{1}{2}$  lines; of the wings 16 lines.

**a. Tasmania.** Presented by J. G. Children, Esq.

## Group 2.

## 116. BOARMIA? CAMELARIA.

**Fœm.** *Alba; tibiæ posticæ non incrassatæ; alæ subdentatæ, nigro conspersæ, linea interiore punctiformi, linea exteriori dentata duplicata, linea submarginali punctiformi interrupta duplicata; macula magna discali fasciæque submarginali subtus nigris; posticæ litura discali conspicua.*

**Boarmia? camelaria, Guen. Phal. i. 256, 394.**

**Australia.**

## Group 3.

## 117. BOARMIA DISPLICATA.

**Mas et fœm.** *Albido-cinerea, robusta; antennæ maris pectinatæ, apices versus filiformes; thorax nigro fasciatus; abdominis segmenta nigro marginata; tibiæ posticæ vix incrassatæ; alæ nigro conspersæ, lineis tribus nigris denticulatis ferrugineo marginatis, linea submarginali alba angulosa fusco marginata, punctis marginalibus annuloque discali nigris; anticæ striga discali exteriori nigra.*

**Male and female.** Whitish cinereous, stout. Antennæ of the male moderately pectinated to much beyond half the length. Thorax

with a black band. Abdomen with a black band on the hind border of each segment. Hind tibiæ hardly incrassated. Wings black-speckled; interior, middle and exterior lines black, denticulated, mostly bordered with ferruginous-brown; submarginal line white, zigzag, brown-bordered; marginal points and discal ringlet black; under side with the discal spot and the exterior line black; marginal band blackish, excavated along the border. Fore wings wings with black streaks across the submarginal line, and with one longer streak, which extends from the discal spot to the border. Length of the body  $4\frac{1}{2}$  lines; of the wings 12—16 lines.

a, b. Moreton Bay. From Mr. Diggles' collection.

c. Sidney. From Mr. Lambert's collection.

#### 118. BOARMIA PROPOSITA.

Mas. *Fusca, gracilis, subtus cinerea; antennæ dense pectinatæ; tibiæ posticæ valde incrassatæ; alæ elongatæ, conspersæ, lineis interiore et exteriori obscure fuscis dentatis, hac lata, linea submarginali cinerea angulosa ex parte fusco marginata, litura discali subtus parva fusca, linea exteriori subtus punctulari.*

*Male.* Brown, slender, cinereous beneath. Antennæ thickly pectinated to the tips. Hind tibiæ much incrassated. Wings elongated, speckled with dark brown; interior and exterior lines dark brown, dentate, the former much broader and more complete than the latter; submarginal line cinereous, zigzag, partly brown-bordered; marginal lunules dark brown; under side with a small brown discal mark, with the interior line distinguished by marks on the veins, and with a brownish submarginal band. Length of the body 6 lines; of the wings 14 lines.

a. Australia. From Mr. Milne's collection.

#### 119. BOARMIA ATTRIBUTA.

Fœm. *Cinerea, gracilis, fusco conspersa; tibiæ posticæ vix incrassatæ; alæ elongatæ, lineis interiore et exteriori nigris per-obliquis costam versus interruptis flexis, hac biangulata, linea submarginali albida indistincta angulosa nigro notata, linea marginali nigra, litura discali parva subtus distincta.*

*Female.* Cinereous, slender, brown-speckled. Hind tibiæ hardly incrassated. Wings elongate; interior and exterior lines black, very oblique, interrupted and bent towards the costa of the

fore wings, in which the exterior line forms two deep angles; submarginal line whitish, indistinct, zigzag, here and there bordered by black marks; marginal line black; discal mark small but distinct beneath, where the exterior line and the submarginal band are less conspicuous. Length of the body 5—6 lines; of the wings 16—18 lines.

*a.* Sydney. From Mr. Diggles' collection.

## 120. BOARMIA DISRUPTA.

*Mas.* *Albido-cinerea, gracilis; antennæ sat late pectinatæ; thorax nigro bifasciatus; abdomen nigro guttatum; tibiæ posticæ subincrassatæ; alæ fusco subconspersæ, lineis interiore et exteriori nigris undulatis perobliquis costam versus obsoletis, lineis tribus ferrugineis, linea submarginali albida angulosa; anticæ striga discali subapicali nigricante.*

*Male.* Whitish cinereous, slender. Antennæ rather broadly pectinated, except at the tips. Thorax with two black bands. Abdomen with two rows of black dots. Hind tibiæ slightly incrassated. Wings minutely brown-speckled; interior and exterior lines black, undulating, very oblique, obsolete towards the costa of the fore wings, each accompanied by a ferruginous line; middle line ferruginous; submarginal line whitish, zigzag, obliquely traversed by a blackish streak towards the costa of the fore wings; discal point of the fore wings and marginal points black; under side with the lines and the submarginal band brown. Length of the body 5 lines; of the wings 14 lines.

*a, b.* Moreton Bay. From Mr. Damel's collection.

## 121. BOARMIA DECEPTARIA.

*Mas.* *Ferruginea, gracilis, subtus cinerea; antennæ pectinatæ, apice filiformes; abdomen nigricante fasciatum; tibiæ posticæ non incrassatæ; alæ latiusculæ, lineis interiore et exteriori nigris dentatis perangustis valde obliquis, linea submarginali subobsoleta, punctis marginalibus nigris, litura discali fasciæque submarginali subtus fuscis.*

*Male.* Ferruginous, slender, dingy cinereous beneath. Antennæ moderately pectinated, except at the tips. Abdomen with blackish bands. Wings rather broad; interior and exterior lines black, dentate, very slender and oblique; submarginal line almost obsolete; marginal points black; under side with a slender brown discal

mark, and with an indistinct and incomplete brown submarginal band. Length of the body 5 lines; of the wings 12 lines.

*a.* Sydney. From Mr. Diggles' collection.

#### Group 4.

##### 122. BOARMIA ATTACTA.

*Fœm.* *Albido-cinerea, nigro conspersa, vix schistacea; thorax et abdomen nigro fasciata; alæ amplæ, lineis interiore et exterioris nigris dentatis valde obliquis fusco marginatis, linea submarginali albido-cinerea angulosa fusco marginata, punctis marginalibus nigris, litura discali subobsoleta.*

*Female.* Whitish cinereous, with a very slight slaty tinge, black speckled, dingy cinereous beneath. Thorax and abdomen with black bands. Hind tibiæ not incrassated. Wings ample; interior and exterior lines black, dentate, very oblique, each accompanied by a brown band; submarginal line whitish cinereous, zigzag, bordered with brown on both sides; marginal points black; discal mark almost obsolete; under side without markings, except an indistinct marginal band. Length of the body 5 lines; of the wings 14 lines.

*a.* Tasmania. Presented by M. Allport, Esq.

##### 123. BOARMIA COGNATA.

*Mas et fœm.* *Pallide cinerea, gracilis, fusco conspersa; antenna maris late pectinata; thorax fuscescente fasciatus; tibia posticæ vix incrassatæ; alæ elongatæ, lineis tribus fuscis subundulatis subdenticulatis vix distinctis nigricante notatis, linea submarginali angulosa pallide cinerea, punctis marginalibus minimis.*

*Male and female.* Pale cinereous, slender, very minutely brown-speckled. Antennæ of the male broadly pectinated, except at the tips. Thorax with a brownish band. Hind tibiæ hardly incrassated. Wings elongate, with three hardly distinct slightly undulating and denticulated brown lines, which are interrupted by blackish marks on the veins; submarginal line pale cinereous, zigzag, slightly brownish-bordered; marginal points very small; under side almost without markings, except a slight submarginal band. Length of the body  $3\frac{1}{2}$ —4 lines; of the wings 10—11 lines.

- a. Tasmania. Presented by M. Allport, Esq.  
 b—d. Sydney. From Mr. Lambert's collection.  
 e. Australia. Presented by the Entomological Club.

## 124. BOARMIA EXSUPERATA.

**Mas.** *Albido-cinerea*; antennæ pectinatæ ramis dense pubescentibus; thorax nigricante fasciatus; tibiæ posticæ incrassatæ; alæ nigricante conspersæ, lineis tribus undulatis fusciscentibus nigro variis, 3a duplicata, linea submarginali albida angulosa, linea exteriori subtus e punctis fuscis; antica striga discali exteriori nigra.

**Male.** Whitish cinereous. Antennæ pectinated, except at the tips; branches thickly pubescent. Thorax with a blackish band. Disks of the abdominal segments brownish. Hind tibiæ incrassated. Wings very minutely blackish speckled, with three undulating brownish lines, which are partly black, the third one double; submarginal line whitish, zigzag, slightly brownish-bordered; marginal points blackish; under side with an exterior line of brown points; submarginal band indistinct. Fore wings with a black discal streak between the exterior line and the submarginal line. Length of the body 4 lines; of the wings 10 lines.

- a. Australia. From Mr. Damel's collection.

## Group 5.

## 125. BOARMIA ATTENTA.

**Mas.** *Flavescente-cinerea, gracilis*; caput fuscum; antennæ late pectinatæ; tibiæ posticæ incrassatæ; alæ breviusculæ, ferrugineo conspersæ, lineis ferrugineis guttularibus indeterminatis, puncto discali fusco, lineis subtus nullis.

**Male.** Yellowish cinereous, slender, paler beneath. Head and palpi brown. Antennæ broadly pectinated, except at the tips. Hind tibiæ incrassated. Wings rather short, ferruginous-speckled, with very incomplete and irregular lines, which are formed of ferruginous spots and dots, and are most distinct on the costa of the fore wings; discal point brown, apparent also beneath, where there are no other markings. Length of the body 4 lines; of the wings 10 lines.

- a. Australia. From Mr. Damel's collection.  
 b. Sydney. From Mr. Diggles' collection.

## New Zealand.

The three following species differ much in structure from all the preceding groups of *Boarmia*.

126. *BOARMIA DEJECTARIA*.

**Mas.** *Saturate ferrugineo-fusca, gracilis, subtus flavescence-cinerea; antennæ usque ad apices pectinatæ; tibiæ posticæ incrassatæ; alæ amplæ, testaceo subconspersæ, lineis interiore et exteriori nigris angustis testaceo submarginatis, linea submarginali testacea vix undulata; anticæ gutta discali nigricante albo punctata.*

**Male.** Deep ferruginous-brown, slender, yellowish cinereous beneath. Antennæ moderately pectinated to the tips. Hind tibiæ incrassated. Wings ample, slightly testaceous-speckled; interior and exterior lines black, slender, slightly testaceous-bordered, the latter hue most conspicuous on the costa of the fore wings; submarginal line testaceous, hardly undulating; under side brown-speckled, with a broad submarginal band. Fore wings with a blackish discal dot, which contains a white point. Length of the body 7 lines; of the wings 16 lines.

**a.** New Zealand. From Major Parry's collection.

127. *BOARMIA ATTRACTA*.

**Mas et fœm.** *Ferruginea, sat robusta, subtus testacea; antennæ maris pectinatæ; abdomen basi testaceo fasciatum; tibiæ posticæ incrassatæ; alæ amplæ, mitta obliqua pallide flavescente, nonnunquam conspersa, guttis quatuor anterioribus flavescens, fascia posteriore obliqua obscure fusca, fascia marginali pallide flavescente ochraceo notata nonnunquam obsoleta.*

**Male and female.** Ferruginous, rather stout, testaceous beneath. Antennæ of the male moderately pectinated. Abdomen with a testaceous band at the base. Hind tibiæ incrassated. Wings ample, with an oblique pale yellowish stripe, which occupies only the base of the hind wings, and extends nearly to the tips of the fore wings, where there is a yellow spot; this stripe has blackish dots along it in front, and it is intersected very obliquely by a dark brown band, which extends from the interior border of the hind wings and becomes pale and attenuated as it traverses the stripe; beyond this there is a black zigzag line, which in the hind wings is testaceous-bordered

on its inner side; a pale yellowish ochraceous-marked marginal band; marginal lunules black; under side with a dark brown discal streak, and with a broad regular brown submarginal band. Hind wings dentate. Length of the body 6—7 lines; of the wings 16—18 lines.

*Var. β.* Wings ferruginous along the exterior border; the stripe mostly clouded.

a. New Zealand. From Mr. Sowerby's collection.

b. New Zealand. From Major Parry's collection.

c. New Zealand. Presented by Dr. Sinclair.

### 128. BOARMIA EXPROMPTA.

*Mas. Ferruginea, sat robusta; antennæ longiusculæ, subpectinatae; tibiæ posticæ incrassatæ; alæ amplæ, dentatæ, testaceo substri-gatæ, lineis tribus fuscis denticulatis valde indistinctis, fascia subtus submarginali lata indistincta pallide fuscescente.*

*Male.* Ferruginous, moderately stout, paler and with a cine-reous tinge beneath. Antennæ rather long, slightly pectinated to the tips. Hind tibiæ incrassated. Wings ample, dentate, indis-tinctly testaceous-streaked; three brown denticulated very indistinct lines; under side with a brown discal dot and a broad indistinct pale brownish submarginal band. Length of the body 7 lines; of the wings 16 lines.

a. New Zealand. Presented by Dr. Sinclair.

### Vancouver's Island.

### 129. BOARMIA IMITATA.

*Mas. Cinerea, gracilis, fusco conspersa; antennæ late pectinatæ; abdomen alas posticas superans; tibiæ posticæ incrassatæ; alæ amplæ, lineis interiore et exteriori nigricantibus subundulatis, linea submarginali guttulari punctisque marginalibus nigris, puncto discali subtus fusco.*

*Male.* Cinereous, brown-speckled, slender, allied to *B. rhom-boidaria*. Antennæ broadly pectinated, except at the tips. Abdo-men extending beyond the hind wings. Hind tibiæ incrassated. Wings ample; interior and exterior lines blackish, slightly undu-lating; submarginal line composed of blackish dots; marginal points black; under side without markings, except a brown discal point. Length of the body 8 lines; of the wings 18 lines.

a. Vancouver's Island. Presented by Dr. Lyall, R.N.

## Country unknown.

The six following species of *Boarmia* belong to nearly as many groups of the genus.

130. *BOARMIA RENARIA*.

**Mas.** *Alba; antennæ plumosæ, apice filiformes; alæ conspersæ, fusco cinerascens, linea interiore indistincta, linea exteriori sat conspicua, linea submarginali alba maculari; antica subtus macula magna discali maculaque trigona apicali nigris.*

*Boarmia renaria, Guen. Phal. i. 253, 388.*

131. *BOARMIA PROJECTA*.

**Mas.** *Fuscescente-cinerea, robusta; antennæ late pectinatæ, apice filiformes; thorax fusco fasciatus; tibiæ posticæ subincrassatæ; alæ elongatæ, fusco conspersæ, lineis interiore et exteriori nigricantibus dentatis undulatis fusco marginatis, linea media minus determinata, linea submarginali cinerea angulosa indistincta, annulo discali parvo fusco.*

**Male.** Brownish cinereous, stout. Antennæ broadly pectinated, except towards the tips. Thorax with a brown band. Hind tibiæ slightly incrassated. Wings elongate, minutely brown-speckled; interior and exterior lines blackish, dentate, undulating, each accompanied by a brown band; middle line less distinct; submarginal line cinereous, zigzag, indistinct; marginal points blackish; discal ringlet small, brown-bordered; under side with the lines almost obsolete, and with no submarginal band. Length of the body 5 lines; of the wings 14 lines.

*a. ——— ?*

132. *BOARMIA PROMOTA*.

**Fœm.** *Albida, nigro subconspersa; pedes robusti, tibiis posticis vix incrassatis; alæ amplæ, lineis interiore et exteriori nigris fuscescente submarginatis, linea media incompleta, linea submarginali albida dentata valde indistincta; antica linea exteriori dentata valde flexa; posticæ dentatæ, linea interiore obsoleta, linea exteriori antice pallida indistincta.*

**Female.** Whitish, thinly and minutely black-speckled. Legs stout; hind tibiæ hardly incrassated. Wings ample; interior and



exterior lines black, accompanied by very indistinct pale brownish bands; interior line bent, obsolete in the hind wings; exterior line acutely dentate, very much bent, its hind part contiguous to the middle line, which is nearly obsolete in front; submarginal line whitish, dentate, very indistinct; under side with the lines almost obsolete, and with no submarginal band. Hind wings dentate; exterior line pale and indistinct, except towards the interior border. Length of the body 6 lines; of the wings 17 lines.

a. ——— ?

### 133. BOARMIA ILLAUDATA.

**Fœm.** *Albido-cinerea, gracilis, nigro conspersa; caput antice nigricans; thorax nigro fasciatus; tibiæ posticæ non incrassatæ; alæ elongatæ, lineis interiore et exteriori nigris undulatis ferrugineo marginatis, linea submarginali albida angulosa fuscescente submarginata, litura discali fusiformi fusco marginata.*

**Female.** Whitish cinereous, slender, minutely black-speckled. Head blackish in front. Hind tibiæ not incrassated. Thorax with a black band. Wings elongate; interior and exterior lines black, undulating, accompanied by less concise pale ferruginous lines; submarginal line whitish, zigzag, very slightly and indistinctly brownish-bordered; marginal points black; discal mark fusiform, brown-bordered, brown beneath, where there is an indistinct pale brown submarginal band. Length of the body 4 lines; of the wings 12 lines.

a. ——— ? From Mr. Milne's collection.

### 134. BOARMIA COLLECTA.

**Mas et fœm.** *Cinerea, gracilis; antennæ maris pectinatæ; thorax nigricante fasciatus; tibiæ posticæ maris subincrassatæ; alæ fusco conspersæ, lineis tribus undulatis subdentatis fuscis aut nigricantibus, linea submarginali albida angulosa, fascia subtus fusca lata submarginali maculam pallidam apicalem includens.*

**Male and female.** Cinereous, slender. Antennæ of the male pectinated, except at the tips. Thorax with a blackish band. Hind tibiæ of the male slightly incrassated. Wings minutely brown-speckled, with three more or less distinct brown or blackish undulating slightly dentate lines; submarginal line whitish, zigzag, slightly brown-bordered; marginal points brown or blackish; under

side with a narrow discal mark, and a broad submarginal brown distinct band, the latter excavated by a pale spot at the tips of the fore wings. Length of the body  $4\frac{1}{2}$ —5 lines; of the wings 11—12 lines.

a—d. ——— ?

### 135. BOARMIA INTERTEXTA.

**Fœm.** *Pallide cinerea, gracilis, nigro conspersa; tibiæ posticæ vix incrassatæ; alæ breviusculæ, latiusculæ, lineis interioribus et exterioribus nigris subarcuatis, hac denticulata, linea media minus determinata, linea submarginali albida angulosa ex parte fusco marginata, punctis marginalibus nigris, litura discali parva fusca.*

**Female.** Pale cinereous, slender, black-speckled. Hind tibiæ hardly incrassated. Wings rather short and broad; interior and exterior lines black, slightly curved, the latter denticulated; middle line less distinct; submarginal line whitish, zigzag, partly and diffusely bordered with brown; marginal points black; discal mark small, brown, apparent also beneath, where the fore wings have a brown submarginal band. Length of the body 3 lines; of the wings 10 lines.

a. ——— ? From Mr. Milne's collection.

### Genus 14. TEPHROSIA.

**Corpus gracillimum. Proboscis distincta. Palpi graciles, hirsuti, frontem non aut vix superantes, articulis indistinctis. Abdomen læve. Pedes graciles; tibiæ posticæ incrassatæ. Alæ tenues, dentatæ, lituris confusis. Mas.**—Antennæ ciliatæ, nonnunquam pectinatæ. Abdomen attenuatum, conicum. **Fœm.**—Antennæ graciles, filiformes. Oviductus sæpiissime exsertus.

**Tephrosia**, *Boisd. Ind.* 198; *Dup.*; *Guen. Phal.* i. 258.

**Ectropis**, *Deileptenia* et *Selidosema*, p., *Hübner. Verz. Schm.* 299, 316.

**Boarmia**, p., *Treit.*

Body very slender. Proboscis distinct. Palpi slender, hirsute, not or hardly extending beyond the front; joints indistinct. Abdomen smooth. Legs slender, smooth; hind tibiæ more or less incrassated; spurs four, rather long. Wings delicate, dentate their markings intermixed. **Male.**—Antennæ simply ciliated, pectinated in some species. Abdomen attenuated, conical. **Female.**—Antennæ slender, filiform. Oviduct almost always prominent.

## Europe.

The European species will form three groups. In the first group, which is the type of the genus, the antennæ have fasciculated ciliæ, the abdomen has a pale basal band, the wings are ample and have distinct rounded teeth and no discal mark. In the second group the antennæ are pubescent; the hind tibiæ are incrassated, and the wings are nearly entire. In the third group the size is small, the antennæ have short and frizzled ciliæ, and the wings are nearly entire.

## Group 1.

## 1. TEPHROSIA CONSONARIA.

*Glaucoscente-albida, nigro conspersa; alæ fusciscente tinctæ, lineis duabus dentatis nigris fusco submarginatis, linea submarginali albida angulosa; anticæ plaga discali exterioris fusca.*

*Geometra consonaria*, Hübn. *Geom.* pl. 30, f. 157. *Sepp. Ins.* v. pl. 7.

*Ectropis consonaria*, Hübn. *Verz. Schm.* 316, 3054.

*Boarmia consonaria*, Dup. *Lep.* iv. 377, pl. 161, f. 4. *Herr.-Sch. Eur. Schm.* iii. 82, 220, pl. 40, f. 246. *Guen. Phal.* i. 264, 411.

*Tephrosia consonaria*, *Boisd. Ind.* 198, 1672.

*Boarmia tetragonaria*, *Curt. Brit. Ent.* pl. 280. *Steph. Ill. Brit. Haust.* iii. 190.

a—d. England. From Mr. Stephens' collection.

e—i. England. From Mr. Stevens' collection.

j, k. England.

## 2. TEPHROSIA CREPUSCULARIA.

*Albida, plus minusve fusciscente suffusa; alæ linea exterioris fusca dentata nigro punctata, linea submarginali pallidioris lunulata, punctis marginalibus nigris; anticæ linea interioris dentata nigro signata.*

———, *Deg. Ins.* ii. 449, pl. 8, f. 16. *Réaumur. Ins.* i. 304, pl. 15, f. 10—12? *De Vill. Ent. Linn.* ii. 337, 514.

*Geometra crepuscularia*, *Wien. Verz.* 101, 8. *Schr. Faun. Boic.* ii. 2, 6, 1613. *Hübn. Geom.* pl. 30, f. 158. *Sepp, Ins.* v. pl. 36. *Haw. Lep. Brit.* 277. *Illig. N. Ausg. dess.* i. 386, 8; *N. Mag.* ii. 167, 8.

- Geometra similaria*, Hüfn. Berl. Mag. iv. 6, 612, 16. Naturf. xi. 67, 16.  
*Geometra biundularia*, Bork. Eur. Schm. v. 162, 65. Esp. Schm. v. pl. 40, f. 4.  
*Geometra abietaria*, Haw. Lep. Brit. 276  
*Ectropis crepuscularia*, Hübn. Verz. Schm. 316, 3052.  
*Boarmia crepuscularia*, Treit. Schm. v. 1, 190, 2. Dup. Lep. iv. 346, pl. 158, f. 3. Frey. Beitr. iii. pl. 246. Steph. Ill. Brit. Haust. iii. 191. Herr.-Sch. Eur. Schm. iii. 82, 219.  
*Tephrosia crepuscularia*, Boisd. Ind. 198, 1571. Guen. Phal. i. 264, 412.  
*Boarmia strigularia*, Steph. Ill. Brit. Haust. iii. 192.  
*a—d.* England. Presented by H. Doubleday, Esq.  
*e—kk.* England. From Mr. Stephens' collection.  
*ll—rr.* England.  
*ss, tt.* Europe. From M. Becker's collection.

## Group 2.

## 3. TEPHROSIA EXTERSARIA.

*Cinerascens*; alæ fusco creberrime conspersæ, linea submarginali pallida undulata, fimbria nigro notata; anticae lineis interiore et media nigricantibus subundulatis, linea exteriori punctulari, plaga submarginali albida.

- Geometra extersaria*, Hübn. Geom. pl. 30, f. 159. Haw. Lep. Brit. 277.  
*Deileptenia extersaria*, Hübn. Verz. Schm. 317, 3057.  
*Boarmia extersaria*, Treit. Schm. vi. 216, 12. Dup. Lep. iv. 373, pl. 161, f. 2. Steph. Ill. Brit. Haust. iii. 192. Herr.-Sch. Eur. Schm. iii. 83, 222.  
*Tephrosia extersaria*, Boisd. Ind. 198, 1573. Guen. Phal. i. 268, 419.  
*a—g.* England. From Mr. Stephens' collection.  
*h, i.* England. From Mr. Stevens' collection.  
*j, k.* England. From Mr. King's collection.  
*l, m.* England.  
*n.* Europe. From M. Becker's collection.

## Group 3.

## 4. TEPHROSIA PUNCTULATA.

*Fuscescens aut albido-fuscescens* ; alæ linea marginali nigra interrupta, fimbria fusco notata ; anticæ lineis quatuor nigricantibus subundulatis apud costam dilatatis, linea submarginali albido marginata ; posticæ lineis ex parte obsoletis.

*Geometra punctulata*, Wien. Verz. 106, 13. *Brahm, Ins. Kal.* ii. 384, 261. *Bork. Eur. Schm.* v. 252, 109. *Hübner. Geom.* pl. 61, f. 317. *Haw. Lep. Brit.* 277. *Ill. N. Ausg. dess.* i. 421, 13.

*Phalæna tigris*, *Naturf.* xiii. 31.

*Selidosema punctularia*, *Hübner. Verz. Schm.* 299, 2897.

*Gnophos punctulata*, *Treit. Schm.* i. 180, 12.

*Boarmia punctulata*, *Dup. Lep.* iv. 373, pl. 161, f. 2. *Steph. Ill. Brit. Haust.* iii. 192. *Herr.-Sch. Eur. Schm.* iii. 83, 222.

*Tephrosia extersaria*, *Boisd. Ind.* 198, 1574. *Guen. Phal.* i. 269, 421.

a, b. England. Presented by B. Cooke, Esq.

c—k. England. From Mr. Stephens' collection.

l—q. England.

r, s. Europe. From M. Becker's collection.

## North America.

## Group 1.

Antennæ of the male pectinated, filiform at the tips. Wings hardly dentate ; the lines represented by points. Fore wings of the male with a small vesicle at the base.

## Group 2.

Antennæ of the male pectinated. Hind tibiæ much incrassated. Wings with the exterior line partly obsolete.

## Group 3.

Like the first European group.

## Group 1.

5. *TEPHROSIA CRIBRATARIA*.

*Pallide testaceo-cinerea; alæ anticæ lineis quatuor; posticæ tribus, punctularibus; abdomen punctis nigris bilineatum.*

*Tephrosia cribrataria*, *Guen. Phal.* i. 260, 399, pl. 3, f. 9.

Georgia.

## Group 2.

6. *TEPHROSIA CANADARIA*.

Var. ? *Pallide cinerea; alæ lineis indeterminatis fuscis, linea exteriori sat lata albido interlineata, linea submarginali e punctis fuscis albo marginatis, punctis marginalibus punctoque discali nigra; anticæ linea submarginali costam versus bene determinata.*

*Tephrosia Canadaria*, *Guen. Phal.* i. 263, 409.

Canada.

*a—c.* Orilla, West Canada. From Mr. Bush's collection.

*d—h.* Nova Scotia. From Lieut. Redman's collection.

*i—n.* Trenton Falls, New York. Presented by E. Doubleday, Esq.

*o, p.* East Florida. Presented by E. Doubleday, Esq.

## Group 3.

7. *TEPHROSIA OCCIDUARIA*.

Fœm. *Cinereo-alba, T. crepusculariæ simillima; palpi unicoloris; alæ squamis elevatis, linea exteriori bene determinata, lituris subtus nullis.*

*Tephrosia occiduaria*, *Guen. Phal.* i. 266, 413.

North America,

The twelve following species can hardly constitute new genera, though they do not well agree with the characters which Guenée assigns to his three groups of North American *Tephrosiæ*.

8. *TEPHROSIA SPATIOSARIA*.

**Mas et fœm.** *Pallide cinerea, fusco conspersa; antennæ maris vix pectinatae; tibiæ posticæ vix incrassatae; alæ lineis interiore et exteriori fuscis undulatis apud venas dentatis fere nigris, hac subduplicata, linea submarginali albida angulosa fusco ex parte marginata, punctis marginalibus nigris sat magnis.*

**Male and female.** Pale cinereous. Antennæ of the male pubescent, hardly pectinated. Hind tibiæ hardly incrassated. Wings minutely brown-speckled; interior and exterior lines brown, undulating, dentate and almost black on the veins, the latter indistinctly double; submarginal line whitish, zigzag, partly bordered with brown; marginal points black, rather large, smaller beneath, where the lines are indistinct. Length of the body 6 lines; of the wings 18 lines.

**a—d.** New York. Presented by E. Doubleday, Esq.

9. *TEPHROSIA ABRAXARIA*.

**Mas.** *Albida; caput et thorax fusco fasciata; antennæ dense ciliatæ; tibiæ posticæ vix incrassatæ; alæ fusco conspersæ, fascia exteriori dentata fusca marginata, linea media undulata minus determinata, linea submarginali albida angulosa fusco submarginata; anticæ fascia interiore fusca.*

**Male.** Whitish. Head and thorax with brown bands. Antennæ with thick-set rather long ciliæ, hardly pectinated. Hind tibiæ hardly incrassated. Wings minutely brown-speckled; exterior line dentate, dark brown, broadly bordered with paler brown on the outer side, so as to form a band, which is traversed by dark brown streaks on the veins; middle line brown, undulating, less distinct; submarginal line whitish, zigzag, diffusedly brown-bordered; marginal points blackish. Fore wings with a brown interior band. Length of the body 5—6 lines; of the wings 14—16 lines.

**a—d.** Nova Scotia. From Lieut. Redman's collection.

10. *TEPHROSIA INTRATARIA*.

**Mas.** *Fuscescente-cinerea; antennæ ciliis longiusculis; tibiæ posticæ non incrassatæ; alæ fusco conspersæ, lineis tribus*

*fuscis undulatis apud venas dentatis nigro-fuscis, linea submarginali pallide cinerea angulosa fusco submarginata, punctis marginalibus nigricante-fuscis.*

**Male.** Brownish cinereous. Antennæ with rather long ciliæ. Hind tibiæ not incrassated. Wings minutely brown-speckled; interior, middle and exterior lines brown, undulating, dentate and blackish brown on the veins; submarginal line pale cinereous, zigzag, slightly brown-bordered; marginal points blackish brown; under side paler, with indistinct lines. Length of the body 6 lines; of the wings 15 lines.

**a.** North America.

## 11. TEPHROSIA DISCONVENTA.

**Mas.** *Cinereo-fusca, fusco conspersa; antennæ validæ, simplices; abdomen e guttis fuscis bilineatum; tibiæ posticæ incrassatæ; ala linea exteriori fusca undulata nigricante punctata, linea submarginali pallida undulata indistincta, linea subtus exteriori arcuata punctulari; anticæ linea interiori, striga apud lineam exteriori alba.*

**Male.** Cinereous-brown, brown-speckled. Antennæ stout, simple. Abdomen pale, with two rows of brown dots. Hind tibiæ incrassated. Wings with the exterior line brown, undulating, marked with blackish points on the veins; submarginal line pale, undulating, indistinct; marginal points black; under side with a blackish discal point, and with a well-defined curved exterior line of blackish points. Fore wings with an interior line; exterior line bordered with white in the disk. Length of the body 5 lines; of the wings 12 lines.

**a, b.** Trenton Falls, New York. Presented by E. Doubleday, Esq.  
**c—h.** Nova Scotia. From Lieut. Redman's collection.

## 12. TEPHROSIA ANTICARIA.

**Mas.** *Albido-cinerea, fusco conspersa; antennæ pubescentes; tibiæ posticæ incrassatæ; alæ lineis tribus fuscis undulatis apud costam bene determinatis, linea submarginali albida angulosa fuscescente marginata, punctis marginalibus obscure fuscis.*

**Male.** Whitish cinereous, very minutely brown-speckled. Antennæ pubescent. Hind tibiæ incrassated. Wings with the



interior, middle and exterior lines brown, undulating, more distinct on the veins and very distinct along the costa; submarginal line whitish, zigzag, diffusedly bordered with pale brown; marginal points dark brown; under side with very indistinct markings. Length of the body 4 lines; of the wings 10 lines.

a. Nova Scotia. From Lieut. Redman's collection.

*Var.?* Length of the body 5 lines; of the wings 12 lines. This may be a distinct species.

b. ———? From Mr. Milne's collection.

### 13. TEPHROSIA AMPLARIA.

*Fœm.* *Albido-cinerea, fusco nigroque conspersa; tibiæ posticæ vix incrassatæ; alæ amplæ, lineis interiore exteriore et submarginali albis angulosis fuscescente et nigricante submarginatis, lunulis marginalibus elongatis strigae discali lunata nigris.*

*Female.* Whitish cinereous, brown and black-speckled. Hind tibiæ hardly incrassated. Wings ample; interior, exterior and submarginal lines white, zigzag, diffusedly bordered with brown, and here and there blackish-bordered; elongated marginal lunules and lunate discal streak black, the latter distinct on the under side. Fore wings hardly dentate. Hind wings distinctly dentate. Length of the body 6? lines; of the wings 18 lines.

a. St. John's Bluff, East Florida. Presented by E. Doubleday, Esq.

### 14. TEPHROSIA DISPUNOTA.

*Fœm.* *Cinerea, fusco conspersa; tibiæ posticæ vix incrassatæ; alæ lineis tribus undulatis fuscis, punctis marginalibus nigris elongatis; antica lineis nigricante notatis, maculis tribus exterioribus discalibus nigricantibus; posticæ subangulatæ, lineis valde indistinctis.*

*Female.* Cinereous, minutely brown-speckled. Hind tibiæ hardly incrassated. Wings with three brown undulating lines; marginal points black, elongated; under side white, thickly speckled with brownish cinereous; the latter hue here and there predominant. Fore wings with the lines blackish-marked, especially on the costa; exterior line with three blackish spots in front along its

outer side. Hind wings slightly angular; lines very indistinct. Length of the body 5½ lines; of the wings 12 lines.

a. St. Martin's Falls, Albany River, Hudson's Bay. Presented by Dr. Barnston.

#### 15. TEPHROSIA SUBMURARIA.

Mas et foem. *Pallide cinerea, fusco conspersa; antennæ maris pubescentes; tibiæ posticæ subincrassatæ; alæ lineis tribus indistinctis fuscescentibus nigricante notatis, linea submarginali albida angulosa subobsoleta, punctis marginalibus nigrificantibus.*

*Male and female.* Pale cinereous, thickly brown-speckled. Antennæ of the male pubescent. Hind tibiæ slightly incrassated. Wings with three indistinct brownish lines, which are blackish-marked on the veins, and especially so on the costa of the fore wings; submarginal line whitish, zigzag, almost obsolete; marginal points blackish; under side with a discal mark and an exterior line. Length of the body 3½—4 lines; of the wings 10 lines.

a, b. Nova Scotia. From Lieut. Redman's collection.

#### 16. TEPHROSIA? COMPTARIA.

Mas. *Albido-cinerea; caput obscure fuscum; antennæ subpubescentes; tibiæ posticæ non incrassatæ; alæ vix conspersæ, lineis tribus fuscis duplicatis subundulatis, linea submarginali fuscescente minus determinata; posticæ lineis subobsoletis.*

*Male.* Whitish cinereous. Head dark brown in front. Antennæ minutely pubescent. Hind tibiæ not incrassated. Wings hardly speckled, with three brown slight undulating double lines; submarginal line brownish, zigzag, less distinct; under side and hind wings with the lines nearly obsolete. Length of the body 4 lines; of the wings 10 lines.

a, b. Nova Scotia. From Lieut. Redman's collection.

#### 17. TEPHROSIA SCITULARIA.

Mas. *Albido-cinerea, fusco conspersa; antennæ serratæ, pubescentes; tibiæ posticæ non incrassatæ; alæ lunulis marginalibus nigro-fuscis, puncto subtilis discali fusco; anticæ lineis pallidis indistinctis.*

**Male.** Whitish cinereous, minutely brown-speckled. Antennæ serrate, pubescent. Hind tibiæ not incrassated. Wings with blackish brown marginal lunules; under side with a brown discal point and with slightly marked lines. Fore wings with the lines pale and indistinct. Length of the body 4 lines; of the wings 10 lines.

**a.** New York. Presented by E. Doubleday, Esq.

### 18. *TEPHROSIA NOTATARIA*.

**Fœm.** *Alba, ferrugineo conspersa; tibiæ posticæ vix incrassatæ; alæ macula discali subtus lunulisque marginalibus obscure fuscis; anticæ fasciis duabus obliquis subrectis ferrugineis, macula intermedia maculisque duabus exterioribus, fascia submarginali vix conspicua; posticæ vix fasciatæ, macula discali parva ferruginea.*

**Female.** White, speckled with ferruginous-brown. Hind tibiæ hardly incrassated. Wings with dark brown marginal lunules; under side with a dark brown discal spot. Fore wings with two oblique irregular nearly straight ferruginous bands, between which there is a dark brown spot; two dark brown spots in the disk beyond the exterior band; submarginal band and bands of the hind wings indicated by some clusters of ferruginous-brown speckles. Hind wings with a small ferruginous-brown discal spot. Length of the body 4? lines; of the wings 11 lines.

**a.** New York. Presented by E. Doubleday, Esq.

### 19. *TEPHROSIA IMPERFECTARIA*.

**Fœm.** *Pallide testaceo-cinerea, fusco conspersa; pedes anteriores fusci, pallido fasciati; tibiæ posticæ subincrassatæ; alæ lineis subobsoletis, punctis marginalibus punctoque discali nigricantibus; anticæ plaga submarginali fusca; posticæ subdentatæ.*

**Female.** Pale testaceous-cinereous, minutely brown-speckled. Anterior tibiæ and tarsi brown, with pale bands; hind tibiæ slightly incrassated. Wings with the lines almost obsolete; marginal points and discal point blackish. Fore wings with a submarginal brown patch in front of the middle of the exterior border. Hind

wings slightly dentate. Length of the body 5 lines; of the wings 14 lines.

a. East Florida. Presented by E. Doubleday, Esq.

### South America

Contains four groups. In the first, which is peculiar to South America, the antennæ are long and pectinated in the male; the fore wings are oblong and thinly clothed, and the interior line corresponds to a black band on the base of the abdomen. The second group is identical with the second North American group, the third group forms part of the first European group, and the fourth group contains two small aberrant species.

#### Group 1.

##### A. Alæ fusco non variæ.

##### A. Pedes anteriores nigricante non cincti.

##### A. Alæ anticæ extus non fuscescentes.

a. Tibiæ posticæ vix incrassatæ. - vacillaria, Guen.

##### b. Tibiæ posticæ incrassatæ.

i. Alæ anticæ non maculatæ. - - dimidiaria, Guen.

ii. Alæ anticæ maculatæ. - - quisquiliaria, Guen.

b. Alæ anticæ extus fuscescentes. - - defimaria, Guen.

B. Pedes anteriores nigricante cincti. - - syrnaria, Guen.

##### B. Alæ fusco variæ.

##### A. Alæ subhyalinæ.

A. Alæ pallidiores. - - - - - bolinaria, Guen.

B. Alæ obscuriores. - - - - - litharia, Guen.

B. Alæ non subhyalinæ. - - - - - detectaria, Guen.

#### 20. TEPHROSIA VACILLARIA.

Mas. *Pallidissime testaceo-cinerea; tibiæ posticæ vix incrassatæ, alæ subdentatæ, nigro subconspersæ, anticæ lines interiori antice interrupta, postice nigro lata, linea exteriori antice punctulari postice dilatata, striga exteriori obliqua, linea submarginali pallida.*

*Tephrosia vacillaria*, Guen. *Phal.* i. 260, 400.

Brazil.

21. *TEPHROSIA DIMIDIARIA*.

**Mas.** *T. vacillariæ simillima, minor; antennæ longiores; tibiæ longiores, magis incrassatæ; alæ lineis minus distinctis, puncto discali.*

*Tephrosia dimidiaria, Guen. Phal. i. 261, 401.*

Brazil.

22. *TEPHROSIA QUISQUILIARIA*.

**Mas.** *Testaceo-cinerea; tibiæ posticæ longæ, crassæ; alæ punctis marginalibus nigris; anticæ maculis ligni-coloribus nigro punctatis, linea submarginali pallida angulosa ex parte obsoleta; posticæ dentatæ.*

*Tephrosia quisquiliaria, Guen. Phal. i. 261, 402.*

Brazil.

23. *TEPHROSIA DEFIMARIA*.

**Mas.** *Testaceo-cinerea; alæ dentatæ, squamis elevatis, linea exteriore tenui nigra dentata, lituris subtilis nullis; anticæ extus fuscescentes, linea submarginali pallida; posticæ lineis tribus nebulosis parallelis, 3a marginali.*

*Tephrosia defimaria, Guen. Phal. i. 261, 403.*

Brazil.

24. *TEPHROSIA SYRNIARIA*.

**Mas.** *Pallide carneo-cinerea; pedes anteriores nigricante-cincti; alæ subhyalinæ; anticæ macula magna apicali rufescente-fusca, macula apicali pallida, linea submarginali albida angulosa, macula discali magna vaga nigricante; anticæ subtilis lunula discali maculaque apicali nigricante maculam pallidam includente.*

*Tephrosia syrniaria, Guen. Phal. i. 262, 404.*

Brazil.

25. *TEPHROSIA BOLINARIA*.

**Mas et fœm.** *Pallide carneo-cinerea; pedes anteriores nigricante-cincti; alæ subhyalinæ, fusco conspersæ, flavescence-fusco pallido variæ, linea submarginali pallida dentata; anticæ macula discali magna ovata fusca; posticæ bari pallidæ, lineæ exteriore punctiformi.*

*Tephrosia bolinaria*, *Guen. Phal.* i. 262, 405.

Brazil.

## 26. *TEPHROSIA LITHARIA*.

**Mas.** *B. bolinariae simillima; tibiae posticae breviores, minus incrassatae; alae obscuriores, fusco minus variae; anticae macula discali magis vaga lituraque costali contiguas; posticae litura unica nigricante costali.*

*Tephrosia litharia*, *Guen. Phal.* i. 262, 406.

Quito.

## 27. *TEPHROSIA DETECTARIA*.

**Fœm.** *Pallide ochracea, nigro strigata, fuscescente nebulosa, linea submarginali et punctis nigris; antica linea exterior nigrum indeterminata, linea submarginali maculari, lunula discali nigra.*

*Tephrosia detectaria*, *Guen. Phal.* i. 263, 407.

Brazil.

## Group 2.

## 28. *TEPHROSIA ARGILARIA*.

**Mas et fœm.** *Flavescente-testacea; antennae serratae; alae anticae lineis interiore et exteriori parallelis valde remotis subobsoletis, linea submarginali maculari, puncto discali fusco; posticae linea fusca subduplicata, linea submarginali punctiformi.*

*Tephrosia argilaria*, *Guen. Phal.* i. 263, 408.

Colombia.

## 29. *TEPHROSIA HYBERNARIA*.

**Fœm.** *Pallide ferruginosa, T. crepusculariae similis; alae nebulosae, puncto discali distincto, subtus cinerea, umbra submarginali nigricante.*

*Tephrosia hybernaria*, *Guen. Phal.* i. 264, 410.

Brazil.

30. *TEPHROSIA QUADRATARIA*.

**Mas.** *Testacea; palpi flexi, articulo 3o longiusculo; antennæ pectinatae; tibiæ posticæ incrassatæ; alæ latæ subdentatæ, nigro conspersæ, fasciis duabus subobscurioribus vix undulatis nigro punctatis, puncto discali nigro, fascia subtus fusca submarginali incompleta.*

**Male.** Testaceous, moderately stout. Palpi bent; third joint more than half the length of the second. Antennæ pectinated, Hind tibiæ much incrassated. Wings broad, slightly dentate, black-speckled, not long, with two indistinct slightly darker, hardly undulating bands, which are accompanied by black points; a black discal point apparent also on the under side, where there is an incomplete submarginal brown band. Fore wings rectangular at the tips. Hind wings rather more dentate than the fore wings. Length of the body 6 lines; of the wings 12 lines.

**a. Venezuela.** From Mr. Dyson's collection.

## Group 3.

31. *TEPHROSIA MNIOPHILARIA*.

**Fœm.** *Albo-cinerea, nigricante conspersa, linea exteriori nigra tenui fusco pallido marginata; anticæ subintegræ, maculis duabus exterioribus ochraceo-flavis, subtus nigricantes; posticæ dentatæ, subtus albida.*

*Tephrosia mniophilaria*, Guen. *Phal.* i. 267, 415.

**Brazil.**

## Group 4.

32. *TEPHROSIA INCONGRUARIA*.

**Fœm.** *Albido-cinerea; tibiæ posticæ vix incrassatæ; alæ integræ, nigro subconspersæ, fuscescente subtinctæ, linea exteriori alba undulata nigro notata, linea submarginali latiore alba angulosa, fascia subtus lata fuscescente submarginali.*

**Female.** Whitish cinereous. Hind tibiæ hardly incrassated. Wings entire, slightly black-speckled, irregularly tinged with pale brown; interior line almost obsolete; exterior line white, undulating, marked with black, the latter hue most apparent on the hind wings; submarginal line white, zigzag, broader and more distinct

than the exterior line; marginal points black; under side with a broad pale brown submarginal band. Length of the body 4 lines; of the wings 10 lines.

Rio Janeiro. In Mr. Fry's collection.

### 33. *TEPHROSIA INEFFECTARIA*.

*Fœm.* *Pallide cinerea; tibiæ posticæ non incrassatæ; alæ fusco conspersæ, lineis duabus subobscurioribus nigro punctatis, linea submarginali albida angulosa, punctis marginalibus punctoque discali nigris; posticæ dentatæ.*

*Female.* Pale cinereous. Hind tibiæ not incrassated. Wings elongate, thickly brown-speckled; interior and exterior lines a little darker than the ground hue, distinguished by black points; submarginal line whitish, zigzag, indistinct; marginal points and discal point black; under side with the brown speckles more confluent but without markings. Hind wings distinctly dentate. Length of the body 4 lines; of the wings 12 lines.

Rio Janeiro. In Mr. Fry's collection.

## Africa.

### 34. *TEPHROSIA SERRATARIA*.

*Mas.* *Pallide ferruginea, fusco conspersa; tibiæ posticæ non incrassatæ; alæ latiusculæ, valde dentatæ, linea exteriori nigra dentata viæ undulata, puncto discali nigro, linea subtus interiori fusca.*

*Female.* Pale ferruginous, moderately stout, thickly brown-speckled. Hind tibiæ not incrassated. Wings much dentated, rather broad, not long; discal dot and exterior line black, the latter dentate, hardly undulating; marginal lunules black, very narrow; under side with a brown interior line. Hind wings more dentate than the fore wings. Length of the body 6 lines; of the wings 16 lines.

a. Port Natal. From M. Gueinzus' collection.

## Asia.

### 35. *TEPHROSIA SINEARIA*.

*Fœm.* *Ochraceo-cinerea; alæ subdentatæ, fusco conspersæ, lineis interiori et exteriori parallelis sinuatis tremulis nigro-fuscis,*



*umbra media postice tenui lineari, subtus magis flavescens  
lineis vix conspicuis.*

*Tephrosia sinearia*, Guen. *Phal.* i. 269, 420.

North China.

### Australia.

The first group in this region is identical with the first European group of *Tephrosia*. In the second group, which is peculiar to Australia, the branches of the antennæ of the male are thickly ciliated, the hind tibiæ are not incrassated, the wings are oblong, and the exterior line of the fore wings forms abrupt angles. In this group *T. excursaria* and the two following species are included, and the next four species may be associated with it, though they do not quite agree with the characters by which it is distinguished. The third group is also Australian; the antennæ are very variable in structure, and the wings have acute triangular teeth. The fourth, fifth and sixth groups are less characteristic of the genus.

### Group 1.

#### 36. *TEPHROSIA BISPINARIA*.

*Fœm. Pallide ochracea; alæ obtusæ, breves, olivaceo variæ, nigro conspersæ, guttis marginalibus nigris; anticæ lineis duabus nigris concisis approximatis umbra media disjunctis, linea exteriora dentata; posticæ linea unica dentata.*

*Tephrosia bispinaria*, Guen. *Phal.* i. 266, 414.

Australia.

### Group 2.

#### 37. *TEPHROSIA EXCURSARIA*.

*Mas et fœm. Pallide testacea; alæ conspersæ; anticæ lineis duabus nigris bene determinatis, 1a flexuosa, 2a dentata antice interrupta postice ochraceo marginata, medio nonnunquam nigro notata.*

*Tephrosia excursaria*, Guen. *Phal.* i. 267, 416.

*Var.?* *Male.* Pale fawn-colour, cinereous beneath. Antennæ rather broadly pectinated. Thorax with a brown band in front. Abdomen with two blackish bands near the base. Hind tibiæ incrassated. Wings elongate, minutely black-speckled, with

three black slender, incomplete, nearly straight, very oblique lines; marginal points and discal point black; under side with a blackish submarginal patch on each wing. Length of the body 5 lines; of the wings 14 lines.

a. Australia. From Mr. Damel's collection.

### 38. *TEPHROSIA EXPORTARIA*.

*Obscure fuscescente-cinerea; antennæ maris subpectinatae; tibia postica non incrassata; alæ elongatae, lineis duabus nigris angulatis valde obliquis ferrugineo marginatis, linea submarginali albida angulosa, litura discali fasciaeque submarginali subtus nigricantibus.*

*Tephrosia exportaria*, Guen. *Phal.* i. 268, 417.

a. Australia. From Mr. Milne's collection.

b. Tasmania. From Mr. Smith's collection.

c, d. Tasmania. Presented by M. Allport, Esq.

e, f. Tasmania. Presented by R. Butler, Esq.

g. Tasmania. Presented by E. Doubleday, Esq.

h. Sydney. From Mr. Diggles' collection.

### 39. *TEPHROSIA PHIBALAPTERARIA*.

Mas. *T. exportariae simillima, minor; alæ vix dentatae, minus conspersae, plus strigatae, lineis gracilioribus; postica linea submarginali magis recta.*

*Tephrosia phibalapteraria*, Guen. *Phal.* i. 268, 418.

Australia?

*Var.?* *Male.* Fawn-colour, pale cinereous beneath. Antennæ densely ciliated. Hind tibiae not incrassated. Wings elongated, brown-speckled, with a black slender very oblique exterior line; submarginal line whitish, zigzag; marginal points black. Fore wings with the exterior line bent in the middle, interrupted and represented by points on the veins in front; interior line black, incomplete. Hind wings with the exterior line bent in front. Length of the body 5 lines; of the wings 14 lines.

a. Sydney. From Mr. Diggles' collection.

40. *TEPHROSIA GRATULARIA*.

**Fœm.** *Obscure rufescente-cinerea; thorax et abdomen nigro fasciata; tibiæ posticæ vix incrassatæ; alæ nebulosæ, sat angustæ, nigro conspersæ, lineis atris macularibus valde indistinctis, linea submarginali albida angulosa, subtus schistaceæ macula discali nigra fasciaque submarginali nigricante.*

**Female.** Dark cinereous, with a reddish tinge, which is especially prevalent on the basal half of the fore wings. Thorax and abdomen with black bands. Hind tibiæ very slightly incrassated. Wings clouded, rather narrow, thickly black-speckled, with very indistinct lines of deep black somewhat diffuse spots; submarginal line whitish, zigzag; marginal points black; under side slate-colour, with a black discal spot and an indistinct blackish submarginal band. Length of the body 5 lines; of the wings 14 lines.

**a.** Moreton Bay. From Mr. Damel's collection.

41. *TEPHROSIA PROPINQUARIA*.

**Fœm.** *Cinerea, rufescente suffusa, fusco conspersa; alæ elongatæ, lineis nigricantibus apud costam dilatatis, 1a indistincta, 2a latiuscula subarcuata, 3a undulata apud venas tantum conspicua, linea submarginali cinerea angulosa intus fusco diffuse marginata, fascia subtus fuscescente lata integra submarginali.*

**Female.** Cinereous, reddish-tinged, thickly brown-speckled. Wings elongate; lines blackish, dilated on the costa of the fore wings; interior line indistinct; middle line rather broad, slightly curved; exterior line undulating, hardly apparent, except on the veins; submarginal line cinereous, zigzag, diffusedly brown-bordered on the inner side; marginal lunules blackish; under side pale cinereous, with a brown discal streak, with the exterior line and with a broad entire submarginal brownish band. Length of the body 5 lines; of the wings 16 lines.

**a.** Australia. From Mr. Milne's collection.

42. *TEPHROSIA SUBTINCTARIA*.

**Mas.** *Pallide cinerea, testaceo subtincta; antennæ pubescentes; tibiæ posticæ subincrassatæ; alæ elongatæ, fusco conspersæ,*

*lineis interiore et exteriori nigris angustis dentatis undulatis, linea submarginali albida angulosa fusco submarginata, lituris subtus nullis; posticæ gutta discali nigricante.*

**Male.** Pale cinereous, slightly testaceous-tinged. Antennæ pubescent, rather stout. Hind tibiæ slightly incrassated. Wings elongate, brown-speckled; interior and exterior lines black, slender, dentate, undulating; submarginal line whitish, zigzag, slightly brown-bordered; marginal points black; under side hardly speckled, without markings. Hind wings with a blackish discal dot. Length of the body 5 lines; of the wings 14 lines.

**a.** Australia. From Mr. Damel's collection.

#### 43. *TEPHROSIA DISPERDITA.*

**Fœm.** *Pallide cinerea, gracilis; caput et thorax nigro fasciata; tibiæ posticæ non incrassatæ; alæ elongatæ, nigro subconspersæ, linea exteriori nigra valde obliqua vix undulata, lineis interiore et media minus determinatis, linea submarginali albida, puncto discali nigro subtus apud alas anticas sat magno.*

**Female.** Pale cinereous, slender. Head and thorax with black bands. Hind tibiæ not incrassated. Wings elongated, slightly and minutely black-speckled, with a black very oblique hardly undulating exterior line; interior and middle lines less distinct; submarginal line whitish, zigzag, slightly blackish-bordered; marginal points and discal point black; under side with the lines almost obsolete, and with the discal dot black in the fore wings, smaller and brown in the hind wings. Length of the body 5 lines; of the wings 14 lines.

**a.** Sydney. Presented by Dr. Sinclair.

#### Group 3.

#### 44. *TEPHROSIA MACTARIA.*

**Mas.** *Pallide cinerascens; antennæ submoniliformes, vix pubescentes; alæ conspersæ, lineis subinterruptis apud venas bene determinatis, linea submarginali angulosa, puncto discali distincto; anticæ lineis apud costam dilatatis, litura discali magna maculaque subapicali subtus nigris.*

*Tephrosia mactaria*, Guen. *Phal.* i. 270, 422.

Australia.

45. *TEPHROSIA EXESARIA*.

**Fœm.** *Subviolaceo-cinerea; alæ pulverulentæ, lineis confusis, punctis marginalibus nigris, fimbria nigro punctata, macula discali supra obsoleta subtus sat magna, fascia marginali subtus integra nigricante; posticæ linea exteriori duplicata distincta.*

*Tephrosia exesaria*, Guen. *Phal.* i. 270, 423.

Australia.

46. *TEPHROSIA FRACTARIA*.

*Obscure cinerea, dense nigro conspersa; antennæ maris ciliatæ; tibiæ posticæ subincrassatæ; alæ lineis tribus dentatis punctisque marginalibus nigris, lineæ submarginali albida angulosa, lunula discali albida nigro marginata.*

*Tephrosia fractaria*, Guen. *Phal.* i. 270, 424.

a. Australia. Presented by Major-Gen. Hardwicke.

b. Australia. Presented by E. Doubleday, Esq.

c. Tasmania. From Mr. Smith's collection.

d—g. Tasmania. Presented by R. Butler, Esq.

h. Tasmania. Presented by M. Allport, Esq.

47. *TEPHROSIA UNITARIA*.

**Fœm.** *Albida, testaceo subtinctoria, nigricante conspersa; palpi caput sat superantes; thorax nigricante fasciatus; pedes antici fusci pallido fasciati; tibiæ posticæ non incrassatæ; alæ latæ, lineis quatuor nigris macularibus indeterminatis, fimbria nigro varia.*

*Female.* Whitish, slightly testaceous-tinged, largely blackish-speckled. Palpi extending somewhat beyond the head; third joint less than half the length of the second. Thorax with a blackish band. Fore tibiæ and fore tarsi brown, with pale bands; hind tibiæ not incrassated. Wings broad, not long, with four very irregular lines, mostly composed of black spots; marginal points black; fringe varied with black; under side less speckled, with the lines indistinct, but more complete than on the upper surface. Length of the body 6 lines; of the wings 16 lines.

a. Tasmania. Presented by M. Allport, Esq.

48. *TEPHROSIA DESPICATA*.

**Mas.** *Obscure cinerea, gracilis; abdomen fusco punctatum; tibiæ posticæ vix incrassatæ; alæ subdentatæ, subnebulosæ, sæpius amplæ, nigro conspersæ, lineis nigris denticulatis indistinctis, linea submarginali angulosa pallide cinerea, lineis subtus fere obsoletis, puncto discali subtus nigricante.*

**Male.** Dark cinereous, slender. Abdomen with two rows of brown points. Hind tibiæ hardly incrassated. Wings subdentate, slightly clouded, rather long and broad, black-speckled; line black, denticulated, indistinct; submarginal line pale cinereous, zigzag, slightly black-bordered, very indistinct; marginal points black, one on each tooth and one between; under side with the lines almost obsolete, and with a minute blackish discal mark. Hind wings more dentate than the fore wings. Length of the body 5 lines; of the wings 14 lines.

**a.** South Australia. Presented by R. Bakewell, Esq.

49. *TEPHROSIA INDIRECTA*.

**Mas.** *Cinerea; antennæ subpectinatæ; tibiæ posticæ vix incrassatæ; alæ dentatæ, subnebulosæ, fusco conspersæ, lineis nigris macularibus indistinctis, linea submarginali pallide cinerea angulosa interrupta, puncto discali nigricante.*

**Male.** Cinereous, slender. Antennæ minutely pectinated. Hind tibiæ hardly incrassated. Wings dentate, thickly and irregularly brown-speckled, slightly clouded; lines blackish, macular, indistinct and irregular; submarginal line pale cinereous, zigzag, here and there obsolete; marginal points black; discal point blackish, apparent also on the under side, where the lines are obsolete and the submarginal band indistinct. Length of the body 4 lines; of the wings 12 lines.

**a.** Sydney. From Mr. Lambert's collection.

## Group 4.

50. *TEPHROSIA PERFECTARIA*.

**Mas et fœm.** *Schistaceo-cinerea, gracilis; antennæ maris subpectinatæ; thorax nigro fasciatus; abdomen nigro guttatum; tibiæ posticæ non incrassatæ; alæ integræ, nigro conspersæ,*

*lineis quatuor e punctis nigris, lineis 2a et 3a fusco submarginatis, subtus obscure cinereæ, gutta discali lineaque unica exteriori nigris.*

*Male and female.* Slaty cinereous, slender. Antennæ of the male slightly pectinated. Thorax with a black band. Abdomen with two rows of black dots. Hind tibiæ not incrassated. Wings entire, black-speckled, with four oblique lines of black points; exterior and submarginal lines slightly bordered with brown; fourth line marginal; under side dark cinereous, with a black discal dot, and with but one dotted line, which is exterior. Fore wings with a black dotted line near the base. Length of the body 4 lines; of the wings 10—13 lines.

a. Sydney. From Mr. Lambert's collection.

b, c. Sydney. From Mr. Diggles' collection.

### Group 5.

#### 51. *TEPHROSIA?* *EUBOLIARIA*.

*Fœm.* *Albido-cinerea, fuscescente suffusa, nigro conspersa; palpi caput sat superantes; antennæ serratæ; tibiæ posticæ subincrassatæ; alæ elongatæ, lineis tribus fuscis, 2a fuscescente marginata, linea submarginali albida angulosa, puncto discali nigro, fascia subtus lata submarginali nigra.*

*Female.* Whitish cinereous, tinged with pale brown, black-speckled. Palpi extending somewhat beyond the head. Antennæ serrated. Thorax and fore wings along the costa with black scales. Hind tibiæ slightly incrassated. Wings elongated; interior, middle and exterior lines brown; the first hardly undulating; the second almost straight, diffusedly bordered with pale brown on the outer side; submarginal line whitish, zigzag, irregularly black-bordered; marginal points and discal point black; under side pale cinereous, without lines, but with a broad black band, which is much abbreviated in the fore wings. Length of the body 5 lines; of the wings 7 lines.

a. Australia. From Mr. Darnley's collection.

52. *TEPHROSIA INTEGRARIA*.

**Fœm.** *Schistaceo-cinerea*; *thorax nigricans fasciatus*; *abdomen nigricante guttatum*; *tibiæ posticæ vix incrassatæ*; *alæ elongatæ, nigro conspersæ, lineis tribus nigris dentatis valdè obliquis vix undulatis, linea exteriorè bene determinata, fasciâ adhuc exteriorè fusca, linea submarginali albida.*

**Female.** Slaty cinereous, moderately stout. Thorax with a blackish band. Abdomen with two rows of blackish dots. Hind tibiæ hardly incrassated. Wings elongate, minutely black-speckled with three black dentate very oblique hardly undulating lines; exterior line more distinct than the other two, accompanied on its outer side by a brown band; submarginal line whitish, zigzag brown-bordered; marginal points black; under side whitish cinereous, without markings, except a rather narrow brown submarginal band. Length of the body 5 lines; of the wings 12 lines.

**a. Australia.** From Mr. Damel's collection.

## Group 6.

53. *TEPHROSIA ABSORPTA*.

**Fœm.** *Albido-cinerea*; *caput fusco bifasciatum*; *tibiæ posticæ non incrassatæ*; *alæ fusco conspersæ, lineis interiorè et exteriorè fuscis undulatis indistinctis apud venas nigro punctatis, linea submarginali albida angulosa, gutta discali elongata nigra*; *posticæ subdentatæ.*

**Female.** Whitish cinereous. Head with two brown bands. Hind tibiæ not incrassated. Wings brown-speckled; interior and exterior lines brown, undulating, indistinct, except on the veins, where they form black points; submarginal line whitish, zigzag; marginal points and elongated discal dot black; under side without markings. Hind wings slightly dentate. Length of the body 4 lines; of the wings 12 lines.

**a. Australia.** Presented by J. Hunter, Esq.

• 54. *TEPHROSIA DESUMPTA*.

**Fœm.** *Albida, fusco conspersa*; *pedes antichi fusci, pallido fasciati*; *tibiæ posticæ non incrassatæ*; *alæ fasciis vix conspicuis, lineis tribus nigricantibus angustis undulatis incompletis, linea submarginali alba angulosa*; *antica puncto discali fusco.*



**Female.** Whitish, brown-speckled. Fore tibiæ and fore tarsi brown, with pale bands; hind tibiæ not incrassated. Wings very indistinctly banded by the speckles; interior, middle and exterior lines blackish, slender, undulating, incomplete; submarginal line white, zigzag, partly bordered by confluent speckles; marginal points black; under side with the markings very indistinct. Fore wings with a brown discal point. Length of the body  $3\frac{1}{2}$  lines; of the wings 10 lines.

**Sydney.** From Mr. Lambert's collection.

### 55. *TEPHROSIA DISPOSITA*.

**Mas.** *Albida; antennæ subpectinatae; thorax nigro fasciatus; tibiæ posticae subincrassatae; alæ nigro conspersæ, lineis interiore et exteriori fuscis undulatis nigro variis, linea adhuc exteriori lineaque media fuscis, illa nigro strigata, linea submarginali albida angulosa.*

**Male.** Whitish. Antennæ slightly pectinated; branches stout, ciliated. Thorax with a black band on the tegulæ. Hind tibiæ slightly incrassated. Wings minutely black-speckled; interior and exterior lines brown, undulating, partly black, dilated on the costa of the fore wings; middle line brown, most complete on the hind wings, as is also the interior line; a brown line beyond the exterior line, containing some black streaks on the veins; submarginal line white, zigzag; marginal points black; under side cinereous, with the lines almost obsolete. Length of the body  $3\frac{1}{2}$  lines; of the wings 10 lines.

**Sydney.** From Mr. Lambert's collection.

### 56. *TEPHROSIA DESITA*.

**Mas.** *Albido-cinerea; antennæ pubescentes; thorax antice fuscus; abdomen nigricante fasciatum; tibiæ posticae valde incrassatae; alæ nigro conspersæ, linea exteriori punctis marginalibus punctoque discali nigris, linea submarginali albida angulosa vix conspicua, linea subtus exteriori e punctis nigris; antica linea interiore punctulari.*

**Male.** Whitish cinereous. Antennæ pubescent. Thorax with a brown band on the fore border. Abdomen with slight blackish bands. Hind tibiæ much incrassated. Wings very minutely black-speckled; discal point, exterior line and marginal points black;

fringe with minute black points; a whitish zigzag very indistinct submarginal line; under side with an exterior line of black points. Fore wings with an interior line indicated by a few black points; exterior line of black points, deeply angular in front. Hind wings with the exterior line entire. Length of the body 3 lines; of the wings 10 lines.

a, b. Moreton Bay. From Mr. Diggles' collection.

### Otaheite.

#### 57. TEPHROSIA MYRMIDONARIA.

Mas et scem. *Nigro-cinerea; alæ ochraceo-varia, lineis sat confusis, lineis media et exteriore approximatis parallelis non diversis, linea interiore concisa flexa pallido marginata, linea submarginali albida angulosa; antica linea submarginali costam versus nigro guttata.*

*Tephrosia myrmidonaria*, Guen. *Phal.* i. 271, 425.

Otaheite.

### New Zealand.

#### 58. TEPHROSIA PATULARIA.

Fœm. *Cervina, sat robusta; tibiæ posticæ non incrassatæ; alæ amplæ, dentatæ, fusco conspersæ, lineis interiore et exteriore fuscescentibus indistinctis, linea submarginali cinerea indistincta vix angulosa, subtus cinerea fascia submarginali lata cervina maculisque marginalibus albidis.*

*Female.* Fawn-colour, rather stout. Hind tibiæ not incrassated. Wings dentate, very ample, minutely brown-speckled; interior and exterior lines brownish, indistinct, undulating in the fore wings, where there is also a brownish line near the base; submarginal line cinereous, indistinct, hardly zigzag; under side cinereous, with a broad fawn-coloured submarginal band; marginal space with whitish spots. Length of the body 6 lines; of the wings 18 lines.

a. New Zealand. Presented by Dr. Sinclair.

#### 59. TEPHROSIA SCRIPTARIA.

Mas. *Cinereo-cervina, sat robusta; antennæ subcrenulatæ; tibiæ posticæ non incrassatæ; alæ latæ, fusco conspersæ, lineis dex-*

*tatis subundulatis, duabus ferrugineis duabusque nigricantibus, linea submarginali albida; antica macula fusca costali subapicali maculaque discali magna nigra.*

**Mals.** Cinereous fawn-colour, rather stout. Antennæ minutely crenulated. Legs stout; hind tibiæ not incrassated. Wings broad, minutely brown-speckled; lines dentate, slightly undulating; interior line blackish, with a ferruginous line along its inner side; middle line ferruginous, much bent towards the discal mark in the fore wings; exterior line blackish, pale-bordered; submarginal line whitish; marginal points black; under side without lines, except the exterior one, with a black streak on each wing, and with whitish patches along the border. Fore wings with a brown costal subapical spot, and with a large black discal spot, which is interlined with fawn-colour. Hind wings with the interior line obsolete. Length of the body  $5\frac{1}{2}$  lines; of the wings 16 lines.

a. New Zealand. From Major Parry's collection.

### Genus 15. PARAPHIA.

**Corpus gracile.** Proboscis brevis, gracilis. Palpi graciles, lœves, recti, frontem paullo superantes, articulis 2o et 3o arcte connexis. Thorax rotundatus. Abdomen breviusculum. Pedes breves; tibiæ posticæ quadricalcaratæ, femoribus vix longiores. Alæ integræ, euncolores, lituris non diversis; anticæ basi vesiculosæ; posticæ angulatæ. **Mas.**—Antennæ late pectinatæ.

*Paraphia, Guen. Phal. i. 271.*

Body slender. Proboscis short, slender. Palpi slender, smooth, straight, extending a little beyond the front; second and third joints rhomboidal, coalesced. Thorax rounded. Abdomen rather short. Legs short; hind tibiæ hardly longer than the femora, with four spurs. Wings entire, alike in colour, and with like markings. Fore wings with a prominent vesicle at the base. Hind wings angular. **Male.**—Antennæ broadly pectinated to the tips.

### North America.

A. Alæ umbra nulla rufescente.

A. Alæ posticæ minus truncatæ. - - deplanaria, Guen.

B. Alæ posticæ plus truncatæ. - - subatomaria, Guen.

B. Alæ umbra rufescente.

A. Alæ spatio marginali non nigricante. - nubecularia, Guen.

B. Alæ spatio marginali nigricante. - - mamurraria, Guen.

## 1. PARAPHIA DEPLANARIA.

Mas. *Testacea ; alæ fusco conspersæ, spatio medio pallidiore et albido, linea exterior arcuata, umbra media vaga recta, linea submarginali fusca nebulosa valde sinuata, puncto discali nigro ; anticæ gutta submarginali pallida.*

*Paraphia deplanaria, Guen. Phal. i. 273, 426.*

North America.

## 2. PARAPHIA SUBATOMARIA.

*P. deplanariæ similis, paullo major ; alæ lineis interiore et exterior obscurioribus subundulatis vix conspicuis ; anticæ linea exterior sat conspicua.*

*Timandra subatomaria, Wood, Ind. Ent. 241, pl. 52, f. 1673.*

*Paraphia subatomaria, Guen. Phal. i. 272, 427.*

North America.

## 3. PARAPHIA NUBECULARIA.

Mas. *Testaceo-alba ; alæ nigricante conspersæ, lineis interiore et exterior nigris nebulosis flexis, hac denticulata extus rufescente marginata, puncto discali nigro ; posticæ umbris duabus parallelis arcuatis.*

*Paraphia nubecularia, Guen. Phal. i. 272, 428.*

Canada.

## 4. PARAPHIA MAMURRARIA.

Mas. *Pallide testaceo-cinerea ; alæ nigricante conspersæ, lituris vagis, linea unica media indistincta, umbra exterior rufescente, spatio marginali nigricante maculam albam includente.*

*Paraphia mamurraria, Guen. Phal. i. 273, 429.*

Canada.

## South America.

## 5. PARAPHIA ? MACARIATA.

Fœm. *Pallide testaceo-cinerea, subtus pallide lutea ; caput fuscens ; thorax antice fuscus ; tibiæ posticæ vix incrassatæ ; alæ fusco conspersæ, non dentatæ, lineis tribus pallide fuscis subparallelis vix undulatis, linea media subduplicata nigro notata, lineis subtus tribus nigricantibus ; posticæ angulata.*

**Female.** Pale cinereous, with a testaceous tinge, pale luteous beneath. Head brownish. Thorax dark brown in front. Hind tibiae hardly incrassated. Wings not dentate, thickly brown-speckled; interior, middle and submarginal lines pale brown, nearly parallel, hardly undulating; middle line slightly double, accompanied by three black points in the fore wings and by two black subcostal spots; marginal points black, elongated; under side with three blackish lines. Hind wings angular. Length of the body 4? lines; of the wings 12 lines.

Rio Janeiro. In Mr. Fry's collection.

#### 6. PARAPHIA? EPIONEATA.

**Fœm.** *Albida, subiridescens, nigricante conspersa; caput antice fuscum; palpi graciles, lineares, caput sat superantes; tibiae posticae subincrassatae; alae subdentatae, subangulatae, fasciis duabus fuscescentibus diffusis valde indistinctis, 1a exteriore, 2a submarginali; anticae litura discali fusca minima; posticae litura discali mediocri rufescente fusco marginata.*

**Female.** Whitish, slightly iridescent, thinly and minutely blackish-speckled. Head brown in front. Palpi slender, linear, extending rather beyond the head; third joint full half the length of the second. Hind tibiae slightly incrassated. Wings slightly dentate and angular, with two brownish diffuse and very indistinct bands, the one exterior, the other submarginal; discal mark brown and very minute in the fore wings, reddish brown-bordered and of moderate size in the hind wings. Length of the body 5 lines; of the wings 14 lines.

Rio Janeiro. In Mr. Fry's collection.

#### Genus 16. BRYOPTERA.

**Corpus sat robustum. Proboscis valida. Palpi breves, recti, disjuncti, frontem non superantes; articulus 3us brevis, conicus. Antennae maris et fœm. graciles, filiformes, laeves. Abdomen robustum, depressum, obtusum. Pedes laeves; tibiae posticae non incrassatae. Alae spissae, dentatae, conspersae, nebulosae, concolores, lineis dentatis.**

**Bryoptera, Guen. Phal. i. 278.**

**Body rather stout. Proboscis robust. Palpi short, straight, apart, not extending beyond the front; third joint short, conical.**

Antennæ slender, filiform and smooth in both sexes. Abdomen robust, depressed, obtuse. Legs smooth; hind tibiæ not incrassated. Wings stout, dentate, speckled, clouded, alike in colour, with dentate lines.

### South America.

#### A. Alæ non viridescente variæ.

##### A. Palpi nigro non varii.

A. Alæ carneo variæ. - - - - - injunctata, Guen.

B. Alæ carneo non variæ. - - - - - discata, Guen.

B. Palpi nigro varii. - - - - - canitiata, Guen.

#### B. Alæ viridescente variæ.

A. Alæ obscuræ. - - - - - infuscaria, Guen.

##### B. Alæ pallidæ.

A. Alæ maculatæ. - - - - - leprosatæ, Guen.

B. Alæ non maculatæ. - - - - - convallata, Guen.

### 1. BRYOPTERA INJUNCTATA.

Mas. *Alba; alæ carneo-fuscescente pallido tinctæ, strigis transversis, lineis interiore et exteriori guttisque marginalibus nigris, linea exteriori undata apud venas magis determinata; antica lineis apud venas dilatatis, linea interiore vix arcuata, umbra media lineari bene determinata.*

*Bryoptera injunctata, Guen. Phal. i. 273, 430.*

Brazil.

### 2. BRYOPTERA INFUSCARIA.

Fœm. *Saturate nigro-cinerea; alæ olivaceo-fusco albo nigroque marmoratæ, lituris confusis, linea submarginali alba angulosa; antica squamis discalibus albis, puncto basali nigro; postica squamis basalibus albis.*

*Bryoptera infuscaria, Guen Phal. i. 274, 431.*

Brazil.

### 3. BRYOPTERA DISCATA.

Fœm. *Pallida; alæ dentatæ, punctis marginalibus nullis, linea submarginali dentata conspicua; anticae subtus nigricantes; posticae linea exteriori atra dentata, fascia antica nebulosa.*

*Bryoptera discata, Guen. Phal. i. 274, 432.*

Brazil.

## 4. BRYOPTERA LEPROSATA.

**Mas et fœm.** *Albo-cinerea; alæ conspersæ, maculis plurimis magnis viridescentibus fasciatæ, lineis indistinctis tenuissimis.*

*Bryoptera leprosata, Guen. Phal. i. 274, 433.*

**Brazil.**

5. BRYOPTERA CONVALLATA.<sup>1</sup>

**Fœm.** *Cinereo-alba; alæ lineis nebulosis viridescentibus et pallide lateritiis, linea exteriori nigra apud venas bene determinata, linea interiori punctulari, linea submarginali alba angulosa.*

*Bryoptera convallata, Guen. Phal. i. 275, 434.*

**Brazil.**

## 6. BRYOPTERA CANITIATA.

**Mas et fœm.** *Alba; palpi nigro varii; alæ cinereo conspersæ et nebulosæ, lineis tenuissimis viz saturatioribus, linea exteriori magis undulata, linea marginali nigricante; anticæ puncto discali.*

*Bryoptera canitiata, Guen. Phal. i. 275, 435.*

**Brazil.**

## Genus 17. HYPOCHROMA.

**Corpus robustum.** Proboscis distincta. Palpi lati, squamoso-hirsuti, caput superantes; articulus 3us longus, filiformis. Thorax latus, depressus; tegulæ remotæ. Abdomen cristatum. Pedes robusti, læves. Alæ dentatæ, pulverulentæ, spissæ, subtus coloratæ; posticæ sæpe latissimæ. **Mas.**—Antennæ pectinatæ. **Fœm.**—Antennæ setacæ. Abdomen subovatum, incrassatum.

*Hypochroma, Guen. Phal. i. 275.*

**Body robust.** Front not tufted, with a black transverse line. Proboscis distinct. Palpi broad, squamous-hirsute, extending beyond the head; third joint bare, filiform, generally very distinct. Thorax broad, depressed; tegulæ far apart. Abdomen with little crests. Legs robust, smooth. Wings dentate, pulverulent, very stout, with very conspicuous markings beneath. Hind wings enlarged hindward. **Male.**—Antennæ pectinated, filiform at the tips. **Female.**—Antennæ setaceous. Abdomen subovate, very thick.

*Note.*—*Agathia*, next to *Hypochroma* in the Synopsis of Genera p. 312, may be re-united to it, and is distinct from Guenée's genus *Agathia*, which belongs to the *Geometridæ*.

## Africa.

### 1. HYPOCHROMA ABYSSINARIA.

*Fœm.* *Flavescente-alba; alæ fusco conspersæ, linea valde dentata lineaque marginali atris, fascia marginali subtus nulla; antica linea interiore atra dentata, striga discali fuscescente.*

*Hypochroma Abyssinaria*, *Guen. Phal. i. 277, 438.*

*Abyssinia.*

The five following species resemble *H. ruginaria* in structure and have much the same colour and markings.

### 2. HYPOCHROMA RESPONDENS.

*Mas.* *Albido-cinerea, fusco conspersa; caput fascia interrupta nigra; palporum articulus 3us 2o vix brevior; abdomen subcristatum; alæ linea exteriora nigra denticulata subundulata, linea submarginali alba angulosa, striga discali fusca indistincta, fascia subtus nulla; antica linea interiore nigra undulata.*

*Male.* Whitish cinereous, thickly brown-speckled. Head with a narrow interrupted black band. Third joint of the palpi almost as long as the second. Abdomen slightly crested. Anterior tibiæ and tarsi brown, with whitish bands. Wings with an exterior black denticulated slightly undulating line, and with a submarginal zigzag white line; marginal lunules black; discal streak brown, indistinct; under side white, without markings. Fore wings with an interior black undulating line. Hind wings much prolonged hindward. Length of the body 7 lines; of the wings 16 lines.

*a.* South Africa. Presented by Sir A. Smith.

### 3. HYPOCHROMA ALTERATA.

*Fœm.* *Alba, cinereo subconsersa; caput fascia lata nigra; palporum articulus 3us 2o longior; abdomen cristatum; alæ linea exteriora nigra undulata dentata, linea submarginali obsoleta, fascia nigra subtus valde interrupta; antica linea interiore nigra vix undulata, striga discali tenui fusca; postica cristata.*



*Female.* White, slightly and thinly grey-speckled. Head with a broad black band. Third joint of the palpi a little longer than the second. Abdomen crested. Fore legs black above. Wings with an exterior black undulating dentate line; submarginal line obsolete; marginal points black, minute; under side with a very incomplete black marginal band, which is much abbreviated hindward in the fore wings, and forms two distinct spots in the hind wings. Fore wings with an interior black hardly undulating line and with a slender brown discal streak. Hind wings crested, extending much beyond the abdomen. Length of the body 7 lines; of the wings 16 lines.

This species differs especially from the preceding one in the form of the exterior line.

α. Port Natal. From M. Gueinzus' collection.

#### 4. HYPOCHROMA COMMUTATA.

*Fœm.* *Alba, viridi conspersa; caput fascia nigra lata concisa; palporum articulus 3us 2o longior; abdomen nigricante cristatum; alæ linea exteriorē dentata undulata viridescēte nigra, spatio exteriorē rufo consperso, linea submarginali subobsoleta, subtus basi lutea fascia lata nigra extus excavata; antica linea interiorē angulata strigae discali tenui viridibus, striga discali subtus lata nigra; postica cristata.*

*Female.* White, minutely green-speckled. Head with a broad black band, which is concise in front. Third joint of the palpi a little longer than the second. Abdomen with blackish crests. Anterior legs black above. Wings with an exterior greenish black undulating dentate line, beyond which there is a red-speckled space; submarginal line nearly obsolete; marginal points black; under side luteous towards the base, with a thick black discal streak in the fore wings, and with a broad black complete band, which is excavated on the outer side. Fore wings with an interior green angular line, and with a slight green discal streak. Hind wings crested, extending much beyond the abdomen. Length of the body 6½ lines; of the wings 16 lines.

This species and *H. perfectaria* and *H. communicans* seem to have had a common origin; it hardly differs from *H. perfectaria*, except in colour and in the band of the head.

α. Sierra Leone. From Mr. Foxcroft's collection.

## 5. HYPOCHROMA COMMUNICANS.

**Fœm.** *Testaceo-albida; caput fascia lata rufescente; palporum articulus 3us 2o longior; abdomen cristatum; alæ linea teriore nigra undulata denticulata, spatio exteriore nigro dispersæ, linea submarginali subobsoleta, subtus basi lutea fascia nigra extus excavata; antica linea interiore fuscangulata.*

**Female.** Testaceous-whitish. Head with a broad reddish band. Third joint of the palpi longer than the second. Abdomen crested. Anterior legs black above. Wings with an exterior black undulating denticulated line; exterior space with black speckles among which there are a few red speckles; submarginal line and marginal points almost obsolete; under side luteous towards the base, with a black streak in the fore wings, and with a black complete band, which is much excavated on the outer side. Fore wing with an interior brown angular line. Length of the body 6 lines of the wings 16 lines.

a. Port Natal. From M. Gueinzus' collection.

## 6. HYPOCHROMA ATTENUANS.

**Fœm.** *Alba, nigricante conspersa; caput fascia lata atra; palporum articulus 3us 2o vix brevior; abdomen nigricante cristatum; alæ linea exteriore dentata subundulata strigosa discali tenui nigris, fascia subtus nigra postice attenuata extus subexcavata; antica linea interiore nigra arcuata.*

**Female.** White, thickly blackish-speckled. Head with a broad deep black band. Third joint of the palpi nearly as long as the second. Abdomen with blackish crests. Fore legs black above with white bands. Wings with an exterior black slightly undulating dentate line; marginal lunules black, very distinct; discal streak slender, black; under side with a black marginal band which is gradually attenuated hindward and is slightly excavated. Fore wings with an interior black curved line. Length of the body 6 lines; of the wings 14 lines.

This species is most allied to *H. alterata*, from which it is distinguished by the less curved interior line and more curved exterior line of the fore wings.

a. Sierra Leone. From Mr. Foxcroft's collection.

## Madagascar.

## 7. HYPOCHROMA RHADAMARIA.

**Mas.** *H. crenariæ* affinis, gracilior; abdomen conicum, apice quadratum; alæ ferrugineo magis conspersa; anticæ subtilius macula apicali nigra incisa; posticæ maculis duabus angulatis nigris.

*Hypochroma Rhadamarina*, Guen. *Phal.* i. 277, 440.

Madagascar.

## Asia.

## Group 1.

The species in this group are closely allied to *H. respondens* and to the four following African species. They may be termed sub-species, or the group may be divided into sub-groups, one of which contains *H. pseudoterpnaria* and *H. attenuans*, another *H. rhadamarina* and *H. ruginaria*, a third *H. respondens* and *H. alterata*, and a fourth *H. communicans*, *H. perfectaria*, *H. dispensata*, and *H. distenta*.

## 8. HYPOCHROMA PSEUDOTERPNAIA.

**Fœm.** Albido-cinerea, nigro conspersa; caput atro fasciatum; abdomen cristatum; ala linea exteriori valde dentata, fascia subtilius antice dilatata.

*Hypochroma pseudoterpnaria*, Guen. *Phal.* i. 276, 436.

**Female.** Whitish cinereous, more thickly speckled with black than *H. attenuans*, and especially so beyond the exterior line of the wings. Head with a deep black band. Third joint of the palpi as long as the second. Abdomen crested. Wings with the exterior edge much more dentate than that of *H. attenuans*; under side like in both species, with the exception of the submarginal band, which in *H. pseudoterpnaria* is dilated in the fore part of each wing to the exterior border. Length of the body 7 lines; of the wings 8 lines.

. North China. From Mr. Fortune's collection.

## 9. HYPOCHROMA TEPHROSIARIA.

**Æm.** *Alba; abdomen cristatum; alæ fusco conspersæ, lineâ tenui dentata, fascia submarginali angusta pallida; antica linea interiore ex parte obsoleta; striga discali recta; postica cristata.*

*Hypochroma tephrosiaria*, Guen. *Phal.* i. 277, 437.

Hindostan ?

## 10. HYPOCHROMA CRENARIA.

**Var. ?** *Mas et æm. Alba; caput fusco fasciatum; antennæ maris pectinatæ; palporum articulus 3us 2o longior; alæ rufescente subconsersæ, linea exteriori rufa acutissime dentata, linea submarginali alba angulosa, fascia subtus nigra submarginali extus dilatata; antica linea interiore angulosa strigaeque discali pallide fuscescentibus.*

*Hypochroma crenaria*, Guen. *Phal.* i. 278, 441.

Hindostan.

*Male and female.* White. Abdomen and hind wings crested. Head with a brown band. Antennæ of the male pectinate. Third joint of the palpi longer than the second. Wings partly and indistinctly reddish-speckled; exterior line red, very acute, dentate; submarginal line white, zigzag, bordered by reddish speckles; under side with a black submarginal band, which is dilated externally in the fore part of each wing. Fore wings with the angular interior line and with the discal streak pale brown. Length of the body 6 lines; of the wings 12—14 lines.

a. Ceylon. Presented by Dr. Templeton.

b. ——— ?

## 11. HYPOCHROMA RUGINARIA.

**Var. ?** *Albida, viridescens-cinereo conspersa; caput rufescent fasciatum; palporum articulus 3us 2o valde longior; abdomen subcristatum; alæ linea exteriori acutissime dentata, linea submarginali alba angulosa, punctis marginalibus fuscis minimis, subtus basi luteæ fascia submarginali latissima nigra; antica lineis interiore et exteriori viridescens, postica linea exteriori rufa.*

*Hypochroma ruginaria*, Guen. *Phal.* i. 278, 442.

North Hindostan.

*Var. ♀ Female.* White, with greenish cinereous speckles. Head with a reddish band. Third joint of the palpi much longer than the second. Abdomen slightly crested. Wings with the exterior line very acutely dentate, greenish in the fore wings, red in the hind wings; space beyond with greenish speckles; submarginal line white, zigzag; marginal points brown, very small; under side luteous towards the base, with a black discal streak on the fore wings and a very broad black submarginal band, which is dilated in each wing. Fore wings with the interior angular line and the discal streak greenish. Length of the body 7 lines; of the wings 16 lines.

a. Sarawak, Borneo. From Mr. Wallace's collection.

## 12. HYPOCHROMA LARIARIA.

*Fœm. Alba, fusco conspersa; caput nigro fasciatum; palporum articulus 3us 2i dimidio brevior; alas linea exteriore nigra acutissime dentata, spatia adhuc exteriore nebuloso lineam submarginalem albam includente, lunulis marginalibus fuscis, subtus basi lutea striga lata discali fasciæque latissima nigris; antica striga discali lineæque interiore angulata nigris.*

*Female.* White, brown-speckled. Head with a black band. Third joint of the palpi less than half the length of the second. Wings slightly clouded on each side of the white zigzag submarginal line; exterior line black, very acutely dentate; marginal lunules brown; under side luteous towards the base, with a broad black discal streak, and with the black submarginal band broader and less excavated than that of *H. ruginaria*. Fore wings with the discal streak and the interior angular line black. Hind wings crested. Length of the body 7 lines; of the wings 18 lines.

Sarawak, Borneo. In Mr. Saunders' collection.

## 13. HYPOCHROMA MINIMARIA.

*Mas et fœm. Albo-cinerea; alas dentata, cinereo conspersæ, linea tenui nigra denticulata, maculis exterioribus pallide subroseis, macula discali nigricante indeterminata, fascia subtus marginali lata nigra integra; antica linea interiore dentata.*

*Hypochroma minimaria*, Guen. *Phal.* i. 279, 443.

Ceylon.

## 14. HYPOCHROMA PERFECTARIA.

**Mas.** *Albida; corpus subtestaceum; caput fascia nigra antia fusca et diffusa; palporum articulus 3us 2o longior; antennae simplices; alae testaceo conspersae extus ex parte pallide ochraceae nigricante conspersae, linea exteriori nigricante dentata undulata, linea submarginali alba angulosa, subtus basi luteae fascia latissima nigra antice dilatata; anticae lineae interiori angulata strigaeque discali pallide ochraceis.*

**Male.** Whitish. Body and costa of the fore wings slightly testaceous. Head with a black band, which is brown or diffuse in front. Third joint of the palpi longer than the second. Antennae simple. Wings testaceous-speckled, blackish-speckled and partly pale ochraceous beyond the blackish dentate undulating exterior line; submarginal line white, zigzag; marginal points blackish under side luteous towards the base, with a black discal streak in the fore wings, and with a very broad black band, which is dilated to the outer border in each wing. Fore wings with the angular interior line and the discal mark pale dull ochraceous. Length of the body 7 lines; of the wings 18 lines.

Hindustan. In Mr. Saunders' collection.

## 15. HYPOCHROMA DISTENTA.

**Fœm.** *Testaceo-albida; caput atro fasciatum; palporum articulus 3us 2o longior; abdomen cristatum; alae linea exteriori fusca denticulata, spatio exteriori nebuloso fusco conspersa, linea submarginali alba angulosa, subtus basi luteae fascia nigra extus excavata.*

**Female.** Whitish, with a slight testaceous tinge. Head with a deep black band. Third joint of the palpi longer than the second. Abdomen crested. Wings with the exterior line brown, denticulated; space beyond it clouded, brown-speckled; submarginal line white, zigzag; marginal points brown, very minute; under side with a luteous tinge at the base, with a black streak in the fore wings, and with a black band which is jagged along the outer side in the hind wings and extends to the border in the fore wings, with the exception of two notches, one of which is apical. Length of the body 5 lines; of the wings 14 lines.

a. North Hindostan. From Mr. James' collection.

16. *HYPOCHROMA DISPENSATA*.

**Mas et fœm.** *Albida; abdomen cristatum; alæ rufescente pallido conspersæ, linea exteriori fusca apud venas nigra dentata, linea submarginali alba angulosa, subtus basi luteæ fascia submarginali nigra; anticæ linea interiore undulata punctisque marginalibus fuscis; posticæ cristatæ, lunulis marginalibus fuscis.* **Mas.**—*Palporum articulus 3us 2o valde brevior; antennæ subpectinatæ.* **Fœm.**—*Palporum articulus 3us 2o vix brevior.*

**Male and female.** Whitish. Abdomen crested. Wings with very minute pale reddish speckles, which are most prevalent along the white zigzag submarginal line; exterior line brown, acutely denticulated and black on each vein; marginal points brown, larger and lunulate in the hind wings; under side luteous at the base, with a black band, which is much narrower than that of *H. distenta*. Fore wings with a brown undulating interior line. Hind wings crested. **Male.**—Third joint of the palpi much shorter than the second. Antennæ slightly pectinated for two-thirds of the length. **Female.**—Third joint of the palpi almost as long as the second. Length of the body 5—5½ lines; of the wings 12—13 lines.

This species hardly differs from the preceding one, except in the narrower black band of the wings, in the colour of the exterior line, and in the deeper curve which it forms towards the exterior border of the fore wings.

**a—d.** North Hindostan. From Mr. James' collection.

**e.** ———? From Mr. Milne's collection.

## Group 2.

This differs from the first group in the smaller size and more slender form of the species, and in the shortness of the third joint of the palpi.

17. *HYPOCHROMA PARVULA*.

**Mas.**—*Albido-cinerea, antice viridescens; caput atro late fasciatum; palporum articulus 2us 3o quadruplo longior; antennæ simplices; abdomen cristatum; alæ linea exteriori nigra denticulata, spatio adhuc exteriori pallide rufescente, linea submarginali alba angulosa, subtus striga discali fasciaque lata integra nigris; anticæ striga discali lineaque interiore dentata*

*nigris.* Fœm.—*Minor, viz viridescens; alæ lineis tenuioribus, fimbria brevior.*

*Male.* Whitish cinereous. Head and thorax pale green, the former with a broad deep black band. Third joint of the palpi elongate-conical, not more than one-fourth the length of the second. Antennæ simple. Abdomen crested. Wings very slightly tinged with green; exterior line black, denticulated, hardly undulating, bordered on the outer side by an interrupted pale red brown-speckled band, the latter limited by the white zigzag submarginal line; marginal dots black; under side white, with a black discal streak, and with a broad black regular submarginal band. Fore wings with a black discal streak, and with a black dentate interior line. The male differs especially from the female in the structure of the lines of the wings, and in the exterior line being more remote from the border. Length of the body 6 lines; of the wings 12 lines.

*Female.* Smaller, less tinged with green, and with a more prevalent reddish tinge. Wings with the lines more slender, the curves of the lines differently formed; fringe shorter; under side with the black band nearer the border. Length of the body 4 lines; of the wings 8 lines.

*a—e.* Hindostan. From Archdeacon Clerk's collection.

### Group 3.

#### 18. HYPOCHROMA POLYPHÆNARIA.

*Mas.* *Flavo-viridescens, nigro conspersa, subtus lutea; palporum articulus 3us brevissimus; antennæ pectinatae, triente apicali filiformi; abdomen fusco cristatum; alæ punctis marginalibus nigris, fascia subtus nigra lata subabbreviata; antica fusco strigata; posticae luteæ, viridescente latissime marginatae.*

*Hypochroma polyphænaria, Guen. Phal. i. 280, 446.*

Hindostan.

Sarawak, Borneo. In Mr. Saunders' collection.

### Group 4.

#### 19. HYPOCHROMA BOARNIARIA.

*Mas.* *Olivaceo-ochracea; palporum articulus 3us brevissimus; antennæ subpectinatae, triente apicali filiformi; alæ fusco saturate strigatae et plagiatae, subtus pallide fusco strigatae macula discali fasciæque latissima saturatioribus.*



*Hypochroma boarmiaria*, *Guen. Phal. i.* 282, 451.

a. Silhet. From Mr. Sowerby's collection.

b. Ceylon. From Mr. Milne's collection.

### Australasia.

The first group of this region is identical with the first Asiatic group, and the second may be included with the third Asiatic group, and is nearly allied to the *Geometridæ*, and one species has an outward resemblance to the *Urapteryda*, the hind wings being nearly caudate. The group is distinguished by the structure of the third joint of the palpi.

#### Group 1.

##### 20. HYPOCHROMA CHLORA.

*Cinerea*; *alæ fasciis duabus albis, 2a antice abbreviata, linea media dentata nigra*; *anticæ linea interiore nigra dentata.*

*Phalæna Chlora*, *Cram. Pap. Exot. iv.* 233, pl. 398, f. C.

*Hypochroma chloraria*, *Guen. Phal. i.* 277, 439.

Amboina.

##### 21. HYPOCHROMA NELEARIA.

*Mas. H. minimariæ simillima viridescente-alba*; *alæ basi et apud costam viridi nebulosæ, linea interiore angulata, linea exterior vix dentata, maculis contiguis exterioribus viridi-cinereis, subtus albæ lunula discali fasciaque submarginali nigris*; *posticæ maculis duabus discalibus nigris.*

*Hypochroma Nelearia*, *Guen. Phal. i.* 279, 444.

Borneo.

##### 22. HYPOCHROMA NETUNARIA.

*Fœm. Viridescence-cinerea*; *alæ dentatæ, viridi pallido variæ, nigro strigatæ*; *anticæ latæ, margine exterior valde convexo, lineis duabus nigris remotis subparallelis, nebulis exterioribus nigris, litura discali nigra*; *posticæ linea una dentata.*

*Hypochroma Netunaria*, *Guen. Phal. i.* 279, 445.

Borneo.

## Group 2.

23. *HYPOCHROMA URAPTERABIA*.

**Fœm.** *Cinereo-viridis*; palporum articulus 3us brevissimus; abdominis segmenta bicristata; tibiæ posticæ incrassatæ; alæ conspersæ, linea exteriorè fusca dentata, puncto discali punctisque marginalibus nigris, subtus basi luteæ marginem versus rufa; posticæ valde productæ obtusæ dentatæ.

**Female.** Cinereous-green. Third joint of the palpi very short. Antennæ long, slender. Abdomen with a double row of crests. Hind tibiæ incrassated. Wings speckled with deeper green or with brown; exterior line brown, acutely dentate; discal point and marginal points black; under side luteous towards the base (this hue much brighter in the hind wings than in the fore wings), red exteriorly, with the exception of the pale border; discal dot and incomplete straight exterior line black. Hind wings obtusely dentate, extremely prolonged hindward. Length of the body 9 lines; of the wings 20 lines.

Sarawak, Borneo. In Mr. Saunders' collection.

24. *HYPOCHROMA SUBTEPENS*.

**Fœm.** *Cinereo-viridis*, subtus albido-testacea; palporum articulus 3us brevissimus; abdominis segmenta bicristata; tibiæ posticæ incrassatæ; alæ vix conspersæ, linea exteriorè fusca denticulata; linea submarginali albida angulosa, subtus basi luteæ fascia submarginali lata nigra extus rufo marginata; posticæ productæ.

**Female.** Cinereous-green, whitish testaceous beneath. Third joint of the palpi extremely short. Abdomen with a double row of minute crests; sides also tufted. Hind tibiæ incrassated. Wings hardly speckled; exterior line brown, denticulated; submarginal line whitish, zigzag; discal point and marginal points brown; under side luteous towards the base, with a black discal dot and a broad black submarginal band, which is bordered with red on the outer side. Hind wings slightly dentate, much prolonged hindward. Length of the body 7 lines; of the wings 16 lines.

Sarawak, Borneo. In Mr. Saunders' collection.

25. *HYPOCHROMA VITTICOSTA*.

**Mas.** *Cinereo-viridis*; caput ferrugineum; palporum articulus 3us minimus; antennæ subserratæ; thorax albo fasciatus;

*abdomen aeneo bicristatum; tibiæ posticæ non incrassatæ; alæ purpureo conspersæ, lineæ exteriori flexa saturate purpurea, fascia subtus submarginali purpurea; antica vitta subcostali alba, lineæ interiori angulata.*

*Male.* Cinereous-green, whitish beneath. Head ferruginous. Third joint of the palpi extremely small, hardly visible. Antennæ minutely serrated, except towards the tips. Thorax with a white band, which is continued along the costa to the tips. Abdomen with two thick aeneous crests. Legs stout; hind tibiæ not incrassated. Wings purple-speckled; exterior line deep purple, deeply bent in the fore wings, greenish in the white stripe, indistinct in the hind wings; marginal lunules deep purple; under side with a purple submarginal band, which is dilated and diffused into speckles in the fore wings. Fore wings with a deeply angular interior line, which is obsolete in front; under side with a deep black discal dot. Hind wings prolonged hindward, hardly dentate. Length of the body 7 lines; of the wings 16 lines.

Barawak, Borneo. In Mr. Saunders' collection.

### Group 3.

#### 26. HYPOCHROMA POLYGRAPHARIA.

*Fœm.* *Viridis; palpi rufi; articulus 3us 2o vix brevior; tibiæ posticæ non incrassatæ; alæ plagis diffusis purpurascente-cinereis, fasciæ mediæ albæ vagæ valde excavatæ antice furcata lineam angulosam viridem includente, lineæ submarginali albida angulosa, subtus rufo variæ fasciæ submarginali latæ excavatæ nigro-fusca.*

*Female.* Green. Head and under side whitish. Palpi red; third joint filiform, nearly as long as the second. Legs slender; hind tibiæ not incrassated. Wings with some diffuse purplish cinereous patches, and with a very irregular and much excavated white middle band, which is forked in front and contains a zigzag green line; submarginal line whitish, zigzag, incomplete; space between it and the border partly pale green speckled with darker green; under side varied with red; discal mark and a broad excavated submarginal band blackish brown. Hind wings prolonged hindward, irregularly and strongly dentate, rather more so than the fore wings. Length of the body 6 lines; of the wings 16 lines.

Barawak, Borneo. In Mr. Saunders' collection.

## Australia.

The first of the following groups much resembles the second Australasian group, but is somewhat different from it, and the three last species especially recede from it in structure. The second group is still more unlike the second Australasian group, and approaches the genus *Ophthalmodes*.

## 27. HYPOCHROMA OCCULTARIA.

*Cinerea, subtus alba; alæ lineis dentatis strigaeque discali nigris, linea submarginali albida angulosa; anticae subtus macula nigris strigaeque rosea; posticae fascia submarginali nigra intus roseo marginata.*

*Boarmia occultaria*, *Boisd. Voy. de l'Astrolabe*, Part I. Lep. 257, L.

*Hypochroma occultaria*, *Guen. Phal.* i. 281, 449.

*Phalæna occultaria*, *Donov. Ins. N. Holl.* pl. 36.

- a. Tasmania. From Mr. Smith's collection.
- b, c. Adelaide. Presented by the Entomological Club.
- d. Australia. Presented by the late Earl of Derby.
- e. South Australia. Presented by R. Bakewell, Esq.
- f. Tasmania. From the collection of the Entomological Society.
- g, h. Australia. From Mr. Damel's collection.
- i, j. Tasmania. Presented by R. Butler, Esq.
- k, l. Sydney. From Mr. Diggles' collection.
- m. Tasmania. Presented by M. Allport, Esq.
- n. Tasmania. Presented by the Rev. Augustus Beaufort.

## 28. HYPOCHROMA PERCOMPTARIA.

*Mas. Violaceo-cinerea, subtus rufescens aut alba; antennæ per-  
tinatæ; thorax nigro fasciatus; abdomen cristatum; pedes  
pilosissimi, carneo-cinerei; alæ lineis interiore et exteriori ni-  
gris angustis flexuosis, linea submarginali cinerea angulosa  
fascia subtus lata incisa atra; anticae lineis duabus basalibus  
nigris parallelis.*

*Hypochroma percomptaria*, *Guen. Phal.* i. 280, 448, pl. 6, f. 4.

Australia.

- a. Tasmania. Presented by Morton Allport, Esq.
- b. Sydney. From Mr. Diggles' collection.

## 29. HYPOCHROMA MUSCOSARIA.

**Mas et foem.** *Viridis; abdomen cristatum; alæ nigro marmoratæ et conspersæ, lineis duabus nigris dentatis interruptis, lineæ submarginali pallida angulosa nigro marginata; anticæ striga discali.*

*Hypochroma muscosaria*, Guen. *Phal.* i. 281, 450, pl. 6, f. 3.

Australia.

## 30. HYPOCHROMA EMILIARIA.

*Viridescente aut testaceo-cinerea; alæ fusco conspersæ et nebulosæ, lineis interiore et exteriori nigris dentatis, lineæ submarginali albida angulosa, fascia subtus lata nigricante albo punctata.*

*Hypochroma Emiliaria*, Doubleday. Guen. *Phal.* i. 280, 447.

a, b. Australia. From M. Becker's collection.

c, d. Tasmania. From the collection of the Entomological Society.

e. Australia. From Mr. Stevens' collection.

f—h. Sydney. From Mr. Lambert's collection.

i, j. Sydney. From Mr. Diggles' collection.

k. Australia. Presented by Gen. Hardwicke.

l, m. Australia. From Mr. Damel's collection.

n. New South Wales. From Mr. Wood's collection.

## 31. HYPOCHROMA DETERIORATA.

**Mas et foem.** *Cinerea, rufo varia, nigro conspersa; palporum articulus 3us brevis; antennæ maris pectinatæ; tibiæ posticæ non incrassatæ; alæ lineis duabus nigris dentatis, lineæ submarginali albida angulosa, fascia subtus nigra submarginali albo punctata, anticæ subtus striga discali lanceolata alba maculam atram includente.*

**Male and female.** Cinereous, varied with red and thickly speckled with black, the red hue most prevalent in the male. Third joint of the palpi about one-fourth the length of the second. Antennæ of the male pectinated, except at the tips. Legs slender; hind tibiæ not incrassated. Wings with the interior and exterior lines black, acutely angular; submarginal line whitish, zigzag; marginal points black; under side whitish cinereous, with a black submarginal white-pointed band. Fore wings beneath with a deep black discal spot, which interrupts a white lanceolate streak. Hind wings beneath with a black discal dot. Length of the body 5—6 lines; of the wings 12—14 lines.

- a—c. Australia. From Mr. Damel's collection.  
 d—e. Sydney. From Mr. Diggles' collection.  
 f—i. Sydney. From Mr. Lambert's collection.  
 j. Australia. Presented by A. F. Evans, Esq.  
 k, l. Australia. From Mr. Milne's collection.  
 m, n. Australia.

### 32. HYPOCHROMA VELUTINATA.

**Fœm.** *Cinerea, nigro conspersa et nebulosa; palporum articulus 3us brevissimus; abdomen nigro cristatum; pedes pilosissimi; alæ vix dentatæ, lineis duabus nigris angulatis, lineæ exteriori fasciæque lata submarginali nigris; posticæ non productæ.*

**Female.** Cinereous, thickly speckled and partly clouded with black. Third joint of the palpi extremely short. Abdomen with a black crest on each segment. Legs rather stout, very pilose. Wings hardly dentate, partly blackish between the black angular interior and exterior lines, the latter of which is much bent; marginal festoon black; under side whitish cinereous, with a broad black submarginal band, which is nearly contiguous to the black exterior line; discal streak black. Hind wings not prolonged. Length of the body 5 lines; of the wings 16 lines.

a. Tasmania. Presented by M. Allport, Esq.

### 33. HYPOCHROMA DISSIDENTANEA.

**Fœm.** *Obscure cinerea, nigro conspersa, subtus albida; palporum articulus 3us brevissimus; thorax et abdomen nigricante guttata; tibiæ posticæ non incrassatæ; alæ vix dentatæ, lineis duabus vix conspicuis, lineæ submarginali cinerea angulosa, fascia subtus fusca lata marginali subexcavata.*

**Female.** Dark cinereous, thickly black-speckled, whitish beneath. Third joint of the palpi extremely short. Thorax with four blackish dots. Abdomen with blackish dots. Anterior legs blackish, with pale bands; hind tibiæ not incrassated. Wings moderately broad, hardly dentate; interior and exterior lines dentate, very indistinct, distinguished by black marks on the veins; submarginal line cinereous, zigzag; marginal points black; under side cinereous, with a brown discal dot and a broad brown marginal band, which is slightly excavated. Length of the body  $4\frac{1}{2}$  lines; of the wings 13 lines.

a. Tasmania. Presented by M. Allport, Esq.

## 34. HYPOCHROMA DISSONATA.

**Fœm.** *Albido-cinerea, nigro conspersa; palporum articulus 3us minimus; thorax nigricante guttatus; abdomen nigricante fasciatum; tibiæ posticæ subincrassatæ; alæ vix dentatæ, lineis duabus nigris dentatis, linea submarginali albida angulosa intus nigricante marginata, litura subtus discali fusca, lineis subtus subobsoletis.*

**Female.** Whitish cinereous, thickly black-speckled. Third joint of the palpi extremely minute. Thorax with four blackish dots. Abdomen with two blackish dots on each of the first and second segments, with short blackish bands on the following segments. Hind tibiæ slightly incrassated. Wings moderately broad, hardly dentate; interior and exterior lines black, acutely dentate, darkest on the veins; submarginal line whitish, zigzag, blackish-bordered on the inner side; discal dot and marginal points black; under side with a brown discal mark, and with almost obsolete lines. Length of the body 5 lines; of the wings 14 lines.

**a. Australia.** Presented by Gen. Hardwicke.

## Group 2.

## 35. HYPOCHROMA ERREBUSATA.

**Fœm.** *Sordide cinerea, nigro conspersa, ochraceo vix suffusa, subtus glauco-alba; palporum articulus 3us 2i dimidio non brevior; pedes graciles; alæ amplæ, subdentatæ, lineis subobsoletis, lunula punctoque nigris discalibus, macula subtus discali atra, fascia subtus nigricante-fusca submarginali guttas albas includente; anticæ striga subtus lutea subcostali.*

**Female.** Dingy cinereous, black-speckled, slightly ochraceous-tinged, glaucous-white beneath. Third joint of the palpi elongate-conical, about half the length of the second. Legs smooth, slender. Wings ample, very slightly and obtusely dentate; lines regular, but almost obsolete; discal lunule black, with an approximate black point; marginal points black; under side with a deep black discal spot, and with a blackish brown submarginal band, which includes a line of white dots; marginal space brownish. Fore wings beneath with a subcostal luteous streak, under which there is a testaceous tinge, the latter hue changing to brown towards the white patch, which includes the discal spot, and which is divided

by a blackish brown curved line. Length of the body 8 lines of the wings 20 lines.

a. Moreton Bay. From Mr. Diggles' collection.

### Country unknown.

#### 36. HYPOCHROMA NYCTENERATA.

**Fœm.** *Alba; caput nigro fasciatum; palporum articulus 3us 2o paullo longior; abdomen subcristatum; alæ linea exterior nigra undulata denticulata, spatio marginali rufescente nigro consperso, linea submarginali testacea angulosa plagis duabus albis marginalibus, fascia subtus latissima nigricante extus excavata.*

Allied to *H. ruginaria*. *Female*. White. Head with a black band. Third joint of the palpi a little longer than the second. Thorax with a slight testaceous tinge. Abdomen crested. Wings slightly testaceous-tinged between the base and the black undulating denticulated exterior line; space beyond dingy reddish black-speckled, with the exception of the testaceous zigzag submarginal line, and two white marginal patches in each wing; under side with a blackish discal streak in the fore wings, and with a very broad blackish band, which is excavated on the outer side. Length of the body 7 lines; of the wings 18 lines.

a. ———? Presented by E. Doubleday, Esq.

#### 37. HYPOCHROMA? DISTENSARIA.

**Fœm.** *Albida, robusta, ochraceo conspersa; palpi porrecti, cepus longe superantes; articulus 3us 2o vix brevior; tibiæ posticæ non incrassatæ; alæ amplæ, linea exterior nigricante undulata dentata, spatio adhuc exterior nigro-consperso, fascia subtus submarginali pallide fusca; anticæ linea interior nigra angulata.*

*Female*. Whitish, stout, ochraceous-speckled. Palpi porrect, extending far beyond the head; third joint almost as long as the second. Hind tibiæ not incrassated. Wings ample; exterior line blackish, undulating, acutely dentate; space beyond the exterior line black-speckled; marginal points black; under side without markings, except a pale brown submarginal band. Fore wings with



an interior black angular line, which forms three curves. Length of the body 5 lines; of the wings 16 lines.

n. ———? From Mr. Milne's collection.

## Genus 18. PACHYODES.

**Corpus** incrassatum. **Frons** prominens, bicolor. **Proboscis** valida. **Palpi** robusti, ascendentes, contigui; articulus 3us brevis, bene determinatus. **Thorax** brevis. **Abdomen** cristatum. **Pedes** breves; tibiæ posticæ non incrassatæ, calcaribus parvis. **Alæ** latæ, velutinæ, nebulosæ, spissæ, subintegræ, subtus nigro maculatæ. **Mas.**—Antennæ pectinatæ, triente apicali simplici. **Fem.**—Antennæ filiformes. **Abdomen** ovatum, apice tumidum.

*Pachyodes*, *Guen. Phal. i. 282.*

Body very thick. Front prominent, protuberant, of two colours. Proboscis robust. Palpi stout, ascending, conniving at their tips; third joint cylindric-conical, short, but very distinct. Thorax short. Abdomen crested. Legs smooth; hind tibiæ not incrassated; spurs short. Wings broad, velvety, clouded, very stout, almost entire, with large black spots on the under sides. **Male.**—Antennæ pectinated to two-thirds of the length. **Female.**—Antennæ filiform. Abdomen ovate, tumid at the tip.

### 1. PACHYODES HÆMATARIA.

*Alba*; *alæ viridi rufoque strigatæ, linea interiore recta nigra postice obsoleta*; *frons rufo-nigra*; *palpi, pectus, pedes et alæ basi subtus fulvo-flava.*

*Terpna hæmataria*, *Herr.-Sch. Exot. Schm. f. 205, 206.*

*Pachyodes almaria*, *Guen. Phal. i. 282, 452.*

Hindustan.

### 2. PACHYODES? LATIFERARIA.

**Mas.** *Cervina*; *antennæ sat late pectinatæ*; *tibiæ posticæ subincrassatæ*; *alæ amplæ, albidæ, cervino nebulosæ, strigis plurimis saturatioribus, lineis saturatioribus indeterminatis ex parte nigris*; *antica fascia exterior latæ alba.*

**Male.** Fawn-colour. Antennæ rather broadly pectinated, except towards the tips. Hind tibiæ slightly incrassated; spurs

rather short. - Wings ample, whitish, clouded with fawn-colour transversely streaked with a deeper hue; lines deep fawn-colour partly black, not well-defined; under side hardly differing from the upper surface. Fore wings with a broad white exterior band, which interrupts the lines. Length of the body 9 lines; of the wings 24 lines.

a. North China. From Mr. Fortune's collection.

### Genus 19. OPHTHALMODES.

Corpus sat robustum. Frons non prominens. Proboscis valida. Palpi robusti, contigui; articulus 2us latius, valde compressus; 3us distinctus, brevissimus. Abdomen læve. Alæ spissæ latæ, nebulosæ, dentatæ, trilineatæ. *Mas.*—Antennæ late pectinatæ. *Fœm.*—Antennæ pectinatæ.

Ophthalmodes, *Guen. Phal. i. 283.*

Body rather stout. Front not prominent. Proboscis robust. Palpi stout, conniving; second joint broad, much compressed third distinct, but very short. Abdomen smooth. Wings stout, broad, dentate, clouded, with three distinct lines. *Male.*—Antennæ broadly pectinated. *Female.*—Antennæ moderately pectinated. Abdomen cylindric-conical.

#### 1. OPHTHALMODES HERBIDARIA.

*Var.?* *Mas et fœm.* Olivaceo-cinerea, sat robusta; antennæ mar late pectinatæ; abdomen e maculis trigonis fuscis bivittatum tibiæ posticæ subincrassatæ; alæ amplæ, lineis tribus nigr cantibus denticulatis undulatis optime determinatis, litw discali cinerea tridentata nigricante-marginata, macula magna discali fasciæque lata submarginali subtus nigricantibus.

Ophthalmodes herbidaria, *Guen. Phal. i. 283, 453.*

Hindustan.

*Var.?* *Male and female.* Cinereous, rather stout, tinged with olive-green. Antennæ of the male broadly pectinated, except at the tips. Abdomen with two rows of triangular brown spots. Hind tibiæ slightly incrassated. Wings ample; interior, exterior and submarginal lines blackish, denticulated, undulating, very distinct as are also the marginal dots and the discal mark, which has

a cinereous tridentate disk ; under side with a large blackish discal spot and a broad blackish submarginal band. Length of the body 8 lines ; of the wings 22 lines.

♂—c. Silhet. From Mr. Stainforth's collection.

♂, c. Hindostan. From the Entomological Society's collection.

## 2. OPHTHALMODES DIURNARIA.

Var.? *Mas.* *Albida, viz viridescens ; antennæ subpectinatae ; abdomen e guttis nigricantibus bivittatum ; tibiæ posticæ subincrassatae ; alæ amplæ, lineis quatuor incompletis denticulatis annuloque discali nigricantibus, fascia submarginali intus excavata maculæque discali subtus fuscis.*

*Ophthalmodes diurnaria*, Guen. *Phal.* i. 284, 454.

*Var.?* *Male.* Whitish, with a very slight greenish tinge. Antennæ slightly pectinated to two-thirds of the length. Abdomen with two rows of blackish dots. Hind tibiæ slightly incrassated. Wings ample, with four blackish denticulated incomplete lines ; marginal lunules and a large very conspicuous discal ringlet also blackish ; under side with a large brown discal spot and with a brown submarginal band, which is very concave on the inner side. Length of the body 7 lines ; of the wings 20 lines.

This species may be distinguished from the preceding one by the antennæ and by the shape of the submarginal band on the under side.

a. Silhet. Presented by E. Doubleday, Esq.

b. Silhet. From Mr. Argent's collection.

## 3. OPHTHALMODES EXEMPTARIA.

*Fœm.* *Albido-viridis ; antennæ subpectinatae, apices versus nudæ ; alæ lineis duabus e punctis fuscis, linea submarginali fusca denticulata subintegra albo marginata, punctis marginalibus nigris ; anticæ maculis costalibus obscure fuscis.*

*Female.* Whitish green. Antennæ slightly pectinated, except towards the tips. Wings with the interior and exterior lines extremely incomplete, nearly confined to brown points on the veins ; submarginal line brown, denticulated, white-bordered, nearly entire ; marginal points black ; under side with a black discal spot and a black submarginal band, which is attenuated hindward.

Fore wings with dark brown costal spots terminating the lines. Length of the body 8 lines; of the wings 20 lines.

The markings of this sub-species or variety hardly differ from those of the preceding one; the discal ringlet is almost obsolete, and the branches of the antennæ are slightly longer.

Sarawak, Borneo. In Mr. Saunders' collection.

#### 4. OPHTHALMODES INFUSARIA.

Mas. *Musco-viridis*, cinereo varia; alæ lineis duabus saturatioribus acute dentatis, 1a apud alas posticas obsoleta, linea submarginali albida angulosa; posticæ annulo discali magno saturate viridi bene determinato.

*Male.* Mossy-green, varied with cinereous, whitish cinereous beneath. Antennæ deeply pectinated. Wings with the interior and exterior lines deeper green, acutely dentate, the former obsolete in the hind wings; submarginal line whitish, zigzag; discal ringlet obsolete in the fore wings, large, distinct, and deep green in the hind wings; under side as in *O. herbidaria*, but with a larger discal spot and with the band of the hind wings narrower. Length of the body 9 lines; of the wings 24 lines.

It differs more than the preceding one from *O. herbidaria*, and has more claim to be considered as a sub-species.

a. Silhet. From the Rev. J. Stainforth's collection.

#### Genus 20. CEROTRICHA.

Mas. Corpus sat gracile. Frons angusta, plana. Proboscis robusta. Palpi caput longe superantes. Antennæ pectinatæ, pubescentes, longissimæ, apices versus filiformes. Abdomen alas posticas superans. Pedes longi; tibiæ posticæ incrassatæ, longissimæ. Alæ elongatæ, dentatæ, nebulosæ, lineis interruptis, annulo discali.

*Cerotricha*, Guen. *Phal.* i. 285.

*Male.* Body rather slender. Front narrow, flat. Proboscis robust. Palpi extending much beyond the head. Antennæ pubescent, nearly as long as the fore wings, pectinated to three-fourths of the length. Abdomen extending beyond the hind wings. Legs long; hind tibiæ incrassated, at least twice the length of the

femora. Wings elongate, dentate, clouded, with interrupted lines and with a discal ringlet.

### 1. CEROTRICHA LICORNARIA.

*Mas. Olivaceo-testacea; alæ fusco strigatæ et nebulosæ, linea submarginali angulosa indistincta, annulo discali nigro; anticæ linea exteriori punctiformi; posticæ linea exteriori denticulata.*

*Cerotricha licornaria*, Guen. *Phal.* i. 285, 455, pl. 20, f. 3.  
St. Domingo.

### Genus 21. ELPHOS.

Corpus sat robustum. Proboscis longa, valida. Palpi compressi, ascendentes, latissimi, articulo 3o brevissimo. Antennæ late pectinatæ, apice nudæ. Pedes longi, graciles; tibiæ posticæ incrassatæ, calcaribus quatuor longis; tarsi spinosi. Alæ amplæ, anticæ apud costam convexæ; posticæ magis dentatæ.

Body rather stout. Proboscis long, robust. Palpi compressed, squamous, ascending, very broad; third joint extremely short. Antennæ of the male broadly pectinated to five-sixths of the length; branches pubescent. Legs long, slender; hind tibiæ incrassated, with four long spurs; tarsi spinose. Wings very ample, dentate. Fore wings convex along the costa. Hind wings more dentate than the fore wings.

### 1. ELPHOS HYMENARIA.

*Cinerea, subtus pallidior; alæ ochraceo variæ, fusco guttata et nebulosæ, lineis tribus angulosis albidis. Fœm. — Alæ albo variæ.*

*Elphos hymenaria*, Guen. *Phal.* i. 285, 446, pl. 16, f. 4.

a—d. Silhet. From the Rev. J. Stainforth's collection.

e—i. Hindostan. Presented by E. Doubleday, Esq.

j, k. Hindostan. From the Entomological Society's collection.

l, m. Silhet. From Mr. Sowerby's collection.

## Genus 22. BRONCHELIA.

Corpus robustum. Frons convexa. Proboscis longa, valida. Palpi lati, ascendentes; articulus 3us brevissimus. Antennæ maris late pectinatæ, apice nudæ. Abdomen maris longissimum subcristatum, fœm. apice obtusum. Tibiæ posticæ plus minusve incrassatæ, calcaribus apicalibus breviusculis. Alæ amplæ; posticæ plus minusve dilatatæ.

Bronchelia, *Guen. Phal.* i. 286.

Epimecis, p., *Hübner. Verz. Schm.* 31.

Boarmia, p., *Treit.; Dup.*

Body stout. Front convex. Proboscis long, robust. Palpi broad, ascending; third joint extremely short. Antennæ of the male broadly pectinated to three-fourths or to seven-eighths of the length. Abdomen very long and slightly crested in the male, obtuse at the tip in the female. Hind tibiæ more or less incrassated; second pair of spurs rather short; tarsi slightly spinose. Wings ample. Fore wings hardly dentate. Hind wings more or less prolonged hindward and dentate.

## North America.

The two following species differ from nearly all the more southern *Broncheliæ*, in the fore wings being less elongated or with the exterior border less oblique, and in the hind wings being less prolonged hindward.

## 1. BRONCHELIA LIRIODENDRARIA.

*Albida* (mas) aut *albido-cinerea* (fœm.); *alæ fusco conspersæ et nebulosæ, linea exteriori nigricante dentata albido marginata, fascia media nigro-fusca, linea submarginali albida angulosa; antica, linea interiore dentata.*

*Phalæna hortaria?* *Fabr. Ent. Syst.* iii. 2, 138, 31.

*Geometra hortaria?* *Hübner. Geom.* pl. 29, f. 153.

*Epimecis hortaria?* *Hübner. Verz. Schm.* 315, 3041.

*Phalæna liriodendraria*, *Abbot and Smith, Lep. Georg.* ii. 203, pl. 102.

*Boarmia hortaria*, *Treit. Schm.* i. 202, 6. *Dup. Lep.* iv. 394, pl. 163, f. 1.

*Bronchelia hortaria*, Guen. *Phal.* i. 288, 462.

*a—c.* United States. Presented by E. Doubleday, Esq.

*d—g.* Georgia. From Mr. Milne's collection.

*h.* ———?

## 2. BRONCHELIA DENDRARIA.

*Mas et foem.* *Præcedenti similis; alæ minus conspersæ, magis dentatæ, fasciis media et submarginali bene determinatis; anticæ fascia media apud strigam discalem excisa.*

*Bronchelia dendraria*, Guen. *Phal.* i. 289, 463.

Georgia.

## 3. BRONCHELIA DISSEPTARIA.

*Mas.* *Albido-cinerea; palporum articulus 3us brevissimus; antennæ late pectinatæ; thorax nigricante fasciatus; tibiæ posticæ vix incrassatæ; alæ amplæ, fusco conspersæ, lineis tribus nigricantibus dentatis undulatis incompletis, linea submarginali alba angulosa intus cervino marginata.*

*Male.* Whitish cinereous. Third joint of the palpi extremely short. Antennæ broadly pectinated. Thorax with a blackish band. Hind tibiæ hardly incrassated. Wings ample, brown-speckled; interior, middle and exterior lines blackish, dentate, undulating, incomplete; submarginal line white, zigzag, bordered with fawn-colour on the inner side; discal streak and elongated marginal lunules blackish. Length of the body 6 lines; of the wings 18 lines.

*Foem.* *Antennæ subsetulosæ; alæ anticæ subdentatæ, linea interiore duplicata; posticæ valde dentatæ.*

*Female.* Pale cinereous. Antennæ very minutely setulose. Wings with brown speckles, which are somewhat confluent about the lines; exterior line dark brown; middle line paler and less complete. Fore wings dentate, with a double interior dark brown line. Length of the body 7 lines; of the wings 20 lines.

*a, b.* North America?

## Mexico.

## 4. BRONCHELIA SUBROHARIA.

**Mas.** *Cinereo-flava; tibiæ posticæ valde incrassatæ; alæ subochraceo punctisque fuscis confusis variæ, lineis tribus pallidis dentatis nigro-fusco ex parte marginatis, lunulis marginalibus nigro-fuscis, fascia submarginali subtus fusca vage abbreviata, anticæ vesiculo basali; posticæ dilatata, valde dentatæ.*

**Male.** Cinereous-yellow, paler beneath. Hind tibiæ much incrassated. Wings here and there dull ochraceous, with various clusters of brown speckles; the three lines pale, dentate, partly accompanied or bordered by blackish brown marks; marginal lunules blackish brown; under side with, especially few speckles on the hind wings; submarginal band brown, irregular, abbreviated hindward. Fore wings with a vesicle near the base. Hind wings much prolonged hindward and deeply dentate. Length of the body 9 lines; of the wings 22 lines.

**a. Mexico.** From Mr. Argent's collection.

## West Indies.

## 5. BRONCHELIA DETEXTA.

**Mas.**—*Albido-cinerea; antennæ apice filiformes; tibiæ posticæ subincrassatæ; alæ fusco-cinereo conspersæ, linea exteriori nigricante angulata undulata, linea submarginali alba angulosa intus costam versus fusco marginata, linea media fusca; anticæ linea interiore fusca angulata.* **Fœm.**—*Alba; alæ vix conspersæ, lineis subobsoletis.*

**Male.**—Whitish cinereous, white beneath. Antennæ broadly pectinated to beyond three-fourths of the length. Hind tibiæ slightly incrassated. Wings with cinereous-brown speckles; exterior line blackish, angular, undulating; submarginal line white, zigzag, bordered on the inner side with brown towards the costa of the fore wings; marginal lunules blackish; middle line brown. Fore wings very oblique along the exterior border, with an interior brown angular line; under side with a large brown subquadrate apical spot, which is excavated on the outer side. **Female.**—Like the male, but white, with the wings much less speckled, and with



the lines much more slight or nearly obsolete. Length of the body —8 lines ; of the wings 18—22 lines.

**Jamaica.** From Mr. Gosse's collection.

**St. Domingo.** From Mr. Tweedie's collection.

#### 6. BRONCHELIA TRANSITARIA.

**Mas.** *Cinerea, ochraceo pallido tincta ; antennæ sat late pectinata, apices versus filiformes ; tibiæ posticæ longissimæ, valde incrassatæ ; alæ fusco conspersæ et nebulosæ, lineis pallidis fusco marginatis ; interiore et exteriori undulatis dentatis vagis, hac valde flexa, submarginali angulosa, lunulis marginalibus nigro-fuscis, fascia subtus submarginali fusca ; posticæ dilatatæ, valde dentatæ, linea interiore obsoleta.*

**Male.** Cinereous, tinged with pale ochraceous. Antennæ rather broadly pectinated to beyond two-thirds of the length. Hind tibiæ much incrassated, very long. Wings thickly speckled and partly clouded with brown ; lines pale, brown-bordered ; interior and exterior lines undulating, dentate, irregular, the former obsolete in the hind wings, the latter much bent ; submarginal line zigzag ; marginal lunules blackish brown ; under side paler, with a brown submarginal band. Hind wings much prolonged hindward, deeply dentate. Length of the body 9 lines ; of the wings 22 lines.

**St. Domingo.** From Mr. Tweedie's collection.

#### 7. BRONCHELIA SCOLOPACEA.

*Cinereo-ochracea, subtus læte ochracea ; alæ fusco conspersæ, lineis tribus dentatis pallidis ferrugineo marginatis, linea media dentata ferruginea, lunulis marginalibus nigricantibus, fascia subtus submarginali fusca ; posticæ dilatatæ, valde dentatæ.*

**Phalæna (Noctua) Scolopacea, Drury, Ins. Exot. ii. 38, pl. 22, f. 1, App. ii.**

**Alcis Scolopacea, Westw. ed. Drury, ii. 40, pl. 22, f. 1. Duncan, Nat. Libr. xxxvii. 218, pl. 27, f. 2.**

This species much resembles *B. transitaria*, but may be distinguished by the hind tibiæ, which are rather less incrassated, by the more ochraceous tinge on the upper surface of the wings, and by the bright ochraceous colour beneath.

**Jamaica.** From Mr. Milne's collection.

**b. ——— ?**

## 8. BRONCHELIA NYCTALEMONARIA.

**Mas.**—*Ochracea, subtus late ochracea; antennæ pectinatae, apice nudæ; tibiæ posticæ incrassatæ; alæ fusco dense et transversè conspersæ, lineis tribus albidis fusco marginatis, lunulis marginalibus nigris, fascia subtus submarginali nigra, litura discali subtus minima; anticæ angustæ; posticæ dilatatæ, subcaudatæ, valde dentatæ, lineis subobsolete.* **Fœm.**—*Major, albida, rufescens-cervino varia.*

**Male.**—Ochraceous, much brighter beneath. Antennæ pectinated to nearly seven-eighths of the length. Hind tibiæ incrassated. Wings thickly and transversely brown-speckled, with three whitish brown-bordered lines, which can hardly be traced on the hind wings; marginal lunules black; under side with few marks on the fore wings, and with none on the hind wings, except the submarginal black band, and a very minute discal mark. Fore wings narrow; exterior border extremely oblique. Hind wings much prolonged hindward, deeply dentate, nearly caudate. **Female.**—Larger, whitish, varied with reddish fawn-colour; under side and markings as in the male. Length of the body 9—10 lines; of the wings 24—26 lines.

*a, b.* St. Domingo. From Mr. Tweedie's collection.

## South America.

The species of this region form two groups; the first having the typical form of *Bronchelia*, the second differing sufficiently in structure to form a new genus.

## Group 1.

## 9. BRONCHELIA FRATERNARIA.

**Mas.** *Carneo-cinerea; tibiæ posticæ valde incrassatæ; alæ carneo-cinerea, nigricante varia, lineis interiore et exteriori distinctis, hac interrupta, linea submarginali albida angulosa nigricante submarginata, striga discali bene determinata, subtus ochraceo-cinereæ, fascia submarginali nigricante; anticæ angustæ, dentatæ, macula submarginali vaga plumbea; posticæ valde dentatæ, lituris discalibus subtus nullis.*

*Bronchelia fraternaria, Guen. Phal. i. 288, 460.*

Brazil.

## 10. BRONCHELIA MATRONARIA.

**Fœm.** *Testaceo-cinerea; thoracis tegula nigro lineata; alæ nigricante conspersæ, linea exteriorē dentata apud venas conspicua, linea submarginali valde indeterminata, linea media recta sat concisa; anticæ dentatæ; posticæ valde dentatæ, lituris discalibus subtus nullis.*

*Bronchelia matronaria*, Guen. *Phal.* i. 288, 461.

Cayenne?

## 11. BRONCHELIA PATRONARIA.

**Fœm.** *Albido-cinerea, ochraceo subincta, subtus albido flava; alæ fusco conspersæ, lineis interiorē et exteriorē e strigis apud venas nigro-fuscis, linea submarginali alba angulosa, linea marginali fusca, fascia submarginali lituraque discali subtus fuscis; anticæ fasciculo basali apud marginem interiorē; posticæ dentatæ, subdilatatæ.*

**Female.** Whitish cinereous, with a slight ochraceous tinge, which especially appears along the lines, whitish yellow beneath. Wings brown-speckled; interior and exterior lines distinguished by short dark brown streaks on the veins; submarginal line white, zig-zag; marginal festoon brown; under side with a brown discal mark on each wing, with a brown submarginal band, and with minute brown speckles, of which hardly any are on the hind wings. Fore wings with a tuft on the interior border near the base. Hind wings moderately dentate, slightly prolonged hindward. Length of the body 9 lines; of the wings 24 lines.

**a.** Honduras. From Mr. Dyson's collection.

## 12. BRONCHELIA PUELLARIA.

**Mas.**—*Alba; alæ vix conspersæ, lineis interiorē et exteriorē subobsoletis; anticæ macula apicali nigra magna subquadrata albo notata, macula marginali nigricante.* **Fœm.**—*Major; alæ pallidiores, nigro conspersæ; anticæ umbra apicali fusciscente.*

*Bronchelia conjugaria*, Guen. *Phal.* i. 287, 457.

Cayenne. Colombia.

## 13. BRONCHELIA PUDICARIA.

Fœm. *B. puellaris simillima; alæ lineis obsoletioribus; antica macula apicali nulla.*

*Bronchelia pudicaria*, Guen. *Phal.* i. 287, 458.

Brazil.

## 14. BRONCHELIA CONJUGARIA.

Fœm. *Alba; alæ fusco dense conspersæ, linea media lineaque exteriori duplicata angulosa cervino-fuscis interruptis, linea submarginali alba angulosa fusco marginata, fascia subtus submarginali nigricante interrupta; anticæ linea interiori duplicata postice abbreviata.*

*Bronchelia conjugaria*, Guen. *Phal.* i. 287, 459, pl. 3, f. 11.

Rio Grande.

## 15. BRONCHELIA MUNDARIA.

Mas. *Alba, antice fuscescens; antennæ late pectinatæ, apices versus filiformes; tibiæ posticæ vix incrassatæ, non longæ, alæ cinereo et fusco subconsersæ, lineis fuscis ex parte obsoletis, fascia marginali fusca subtus bene determinata; anticæ costa fusco dense conspersa, linea exteriori apud costam duplicata, plaga apicali fusca lineam submarginalem cineream includente; posticæ linea exteriori duplicata.*

*Male.* White. Head and fore part of the thorax brownish. Antennæ broadly pectinated to two-thirds of the length. Hind tibiæ hardly incrassated, not long. Wings very thinly cinereous or brown-speckled, except along the costa of the fore wings, where the speckles are numerous and the lines are dilated; the latter are brown, dentate, partly obsolete, and the exterior line is double in the hind wings and towards the costa of the fore wings, where it limits an apical brown patch, in which the cinereous submarginal line may be traced; this patch forms part of the marginal band which appears at intervals elsewhere, and is more complete on the under side, where there are no speckles. Length of the body 8 lines; of the wings 20 lines.

Rio Janeiro.

a. Nauta, Amazon Region. From Mr. Bates' collection.

b. Brazil.

## 16. BRONCHELLA DIFFUNDARIA.

**Mas et fœm.** *Alba; antennæ maris latissime pectinatæ, apice filiformes; tibiæ posticæ vix incrassatæ, non longæ; alæ cinereo et fuscescente subconspersæ, lineis fuscescentibus angulatis, linea submarginali alba apud costam conspicua fuscoque intus marginata, fascia costali brevi latissima rufescente-cervina, fascia subtus submarginali incompleta.*

**Male and female.** White. Antennæ of the male very broadly pectinated to nearly five-sixths of the length. Hind tibiæ hardly incrassated, shorter than in other species of the genus. Wings thinly cinereous- or brownish-speckled; lines brownish, slight, angular; submarginal line white, obsolete except towards the costa of the fore wings, where it is bordered with brown on the inner side, and is accompanied on the outer side by a very broad reddish fawn-coloured band; under side not speckled, with an incomplete brown submarginal band. Length of the body 8—9 lines; of the wings 22—28 lines.

**a—c.** Venezuela. From Mr. Dyson's collection.

## Genus 23. STENOTRACHELYS.

**Corpus sat robustum.** Frons plana, non declivis. Palpi recti, valde squamosi, articulo 3o indistincto. Antennæ maris pectinatæ breviusculæ, fœm. crenulatæ. Abdomen maris conicum breviusculum, fœm. acutum oviductu exserto. Tibiæ posticæ vix incrassatæ, femoribus vix longiores, calcaribus parvis approximatis. Alæ oblongæ, spissæ, strigatæ, valde dentatæ.

*Stenotrachelys*, Guen. *Phal.* i. 290.

*Deileptenia*, p., Hübn. *Verz. Schm.* 317.

Body rather stout. Front flat, vertical. Palpi straight, very squamous; third joint indistinct. Antennæ pectinated and rather short in the male, crenulate in the female. Abdomen rather short, conical in the male, acute and with a prominent oviduct in the female. Hind tibiæ very slightly incrassated, hardly longer than the femora; spurs short, approximate. Wings oblong, stout, streaked, much dentated, with distinct lines.

## 1. STENOTRACHELYS APPROXIMARIA.

*Cinerea*; alæ conferte conspersæ, olivaceo nebulosæ, lineis interiore et exteriori nigricantibus albido marginatis, linea submarginali angulosa albida; antica linea exteriori valde flexa.

*Cymatophora simplex approximaria*, Hübn. Exot. Schm. i.; Lep. v.; Geom. ii.; Cym. B. a.

*Deileptenia approximaria*, Hübn. Verz. Schm. 317, 3061.

*Stenotrachelys approximaria*, Guen. Phal. i. 290, 464.

North America.

Var.? Mas. *Cinereo-cervina*, robusta; palporum articulus 3us brevissimus; antennæ late pectinatae, apice filiformes; tibiæ posticæ vix incrassatæ; alæ latæ, nigro conspersæ, linea exteriori nigro undulata dentata extus albido marginata, linea submarginali albida angulosa intus nigro marginata; antica vix dentatæ, basi albidæ, linea interiori nigra; posticæ dentatæ.

*Male*. Cinereous fawn-colour, stout. Third joint of the palpi extremely short. Antennæ broadly pectinated, except at the tips. Hind tibiæ hardly incrassated. Wings broad, irregularly black-speckled; exterior line black, undulating, dentate, whitish-bordered on the outer side; submarginal line whitish, zigzag, mostly black-bordered on the inner side; discal streak and marginal lunules black; under side without lines, with the discal mark obsolete in the hind wings, and with a brown very incomplete submarginal band. Fore wings hardly dentate, whitish at the base, with an irregular black interior line. Hind wings distinctly dentate. Length of the body 7 lines; of the wings 16 lines.

a. United States. Presented by E. Doubleday, Esq.

## Genus 24. XERODES.

Mas. Oculi extantes. Palpi recti, subrostriformes, articulis distinctis, 3o rhomboideo nudo. Antennæ fasciculis tuberculatis. Abdomen conico-cylindricum. Pedes robusti; tibiæ posticæ lanuginosæ, valde incrassatæ. Alæ oblongæ, læves, subdentatæ, lituris paucis; anticæ acutæ, subfalcatæ, costa valde convexa; posticæ angustæ, angulatæ.

*Xerodes*, Guen. Phal. i. 291.

**Male.** Eyes prominent. Palpi straight, subrostriform, with very distinct joints; third joint rhomboidal, bare. Antennæ with tufted tubercles. Abdomen cylindric-conical. Legs robust; hind tibiæ much incrassated, with thick downy hairs. Wings oblong, smooth, slightly dentate, with few markings. Fore wings acute, subfalcate; costa very convex. Hind wings narrow, with a prominent angular tooth.

### 1. XERODES YPSARIA.

**Mas.** *Rufescente-cinerea; alæ nigro conspersæ, linea media lata recta nigricante, linea exteriori punctulari; antica linea arcuata, puncto discali maculaque exteriori nigricantibus.*

*Xerodes Ypsaria, Guen. Phal. i. 291, 465.*

Borneo.

### Genus 25. GNOPHOS.

Corpus gracile. Frons rotundata, squamosa, plus minusve tumida. Proboscis bene determinata. Palpi breves, recti, squamosi, disjuncti, frontem vix superantes, articulis indistinctis. Pedes glabri, longiusculi; tibiæ posticæ plus minusve incrassatæ. Alæ latæ, sericæ, nitentes, dentatæ, concolores, lituris non diversis. **Mas.**—Antennæ pectinatæ aut villosæ. Abdomen attenuatum, carinatum, apice quadratum. **Fem.**—Abdomen apice conicum. Oviductus exsertus.

*Scotopteryx, Catascia, Ascotis, Dyscia et Hyposcotis, Hübn. Verz. Schm. 313, 314.*

*Gnophos, Treit. Schm. i. 160; Dup.; Boisd.; Herr.-Sch.; Leder.; Guen. Phal. i. 292.*

*Charissa, Curt.; Steph.*

Body slender. Front rounded, squamous, more or less tumid. Proboscis very distinct. Palpi short, straight, separate, squamous, hardly extending beyond the front; joints indistinct. Antennæ of the male pectinated or villose and stout. Abdomen of the male attenuated, keeled, terminated by a quadrate tuft of hairs; that of the female ending in a conical point, with a prominent oviduct. Legs smooth, rather long; hind tibiæ more or less incrassated. Wings broad, silky, shining, alike in colour and with like markings, more or less dentate. Hind wings more dentate than the fore wings.

## Europe.

- A. Alæ lineis non dentatis. - - - - dumetata, *Treit.*  
 B. Alæ lineis dentatis.  
 A. Alæ supra nigricante marginatæ. - - - - respersaria, *Hüb.*  
 B. Alæ supra nigricante non marginatæ.  
 A. Alæ testaceo plagiatis - - - - variegata, *Dup.*  
 B. Alæ testaceo non plagiatis.  
 a. Alæ lineis albidis.  
 i. Statura sat magna.  
 \* Tibiæ breviores. - - - - glaucinata, *Hüb.*  
 \*\* Tibiæ longiores. - - - - sibirita, *Guen.*  
 ii. Statura parva - - - - dolosaria, *Herr.-Sch.*  
 b. Alæ lineis cervinis. - - - - mucidaria, *Hüb.*  
 c. Alæ lineis nigricantibus.  
 i. Alæ spatio intermedio obscuriore. furvata, *Wien. Verz.*  
 ii. Alæ spatio intermedio non obscuriore.  
 \* Alæ albo irroratæ.  
 † Alæ plus dentatæ. - - - - obscurata, *Wien. Verz.*  
 †† Alæ minus dentatæ. - - - - serraria, *Ramb.*  
 \*\* Alæ albo non irroratæ.  
 † Alæ anticæ apice valde productæ et acuminatæ, ambigua, *Dup.*  
 †† Alæ anticæ minus acutæ.  
 ‡ Thorax nigricante non fasciatus.  
 § Alæ nebulosæ. - - - - Sartata, *Treit.*  
 §§ Alæ non nebulosæ.  
 + Alæ lineis bene determinatis. serotinaria, *Wien. Verz.*  
 ± Alæ lineis indeterminatis. canitiaria, *Guen.*  
 †† Thorax nigricante fasciatus.  
 § Frons non nigricans.  
 + Antennæ maris pectinatæ. dilucidaria, *Wien. Verz.*  
 ± Antennæ maris simplices. Meyeraria, *Delah.*  
 §§ Frons nigricans.  
 + Antennæ non simplices. mendicaria, *Herr.-Sch.*  
 ± Antennæ simplices.  
 ++ Alæ violaceo tinctæ. ophthalmicata, *Leder.*  
 †† Alæ non violaceo tinctæ.



- ☞ Alæ subtus linea alba.  
pullata, *Wien. Verz.*  
☞ Alæ subtus linea nulla alba.  
+ Alæ anticæ striga discali.  
pullularia, *Herr.-Sch.*  
++ Alæ anticæ annulo discali.  
onustaria, *Herr.-Sch.*

## 1. GNOPHOS DUMETATA.

*Rufescente aut violaceo-cinerea; tibiæ posticæ incrassatæ; alæ conspersæ; anticæ lineis tribus obscuratis subparallelis non dentatis apud venas nigro maculatis; posticæ lineis duabus, gutta discali.*

*Gnophos dumetata*, *Treit. Schm.* vi. 163, 2. *Boisd. Ind. Meth.* 200, 1585. *Herr.-Sch. Eur. Schm.* iii. 74, f. 187, pl. 63, 388; pl. 67, f. 412. *Guen. Phal.* i. 295, 468.

*Ennomos Daubearia*, *Boisd. Ind.* 183, 1457. *Dup. Lep. Sup.* iv. 238, pl. 71, f. 1. *Herr.-Sch. Eur. Schm.* iii. 73, 186, pl. 43, f. 260.

*Gnophos Daubearia*, var. *Larchiaria*, *Donzel, Ann. Soc. Ent. Fr.* 2me ser. vii. 78.

*Gnophos temperata*, *Eversm. Bull. Mosc.* 1846, 9, pl. 2, f. 1.

South France. Dalmatia. Austria. South Russia.

## 2. GNOPHOS RESPERSARIA.

*Fusca; alæ nigricante conspersæ, lineis interiore et exteriori arcuatis margineque nigricantibus; anticæ linea adhuc interiore lituraque costali subapicali nigricantibus.*

*Geometra respersaria*, *Hübner. Geom.* pl. 79, f. 406.

*Geometra perspersaria*, *Franck, Cat. Lep.* 61, 1079.

*Scotopteryx respersaria*, *Hübner. Verz. Schm.* 313, 3025.

*Gnophos perspersata*, *Treit. Schm.* vi. 166, 4.

*Gnophos respersaria*, *Boisd. Ind.* 200, 1590. *Herr.-Sch. Eur. Schm.* iii. 76, 196, f. 505, 506. *Guen. Phal.* i. 296, 469.

Andalusia.

## 3. GNOPHOS MUCIDARIA.

*Albido-cinereascens; alæ subnebulosæ, fusco transverse strigatæ, lineis subcervinis diffusis fusco notatis, fimbria albida cervino notata; anticæ lineis apud costam dilatatis obscurioribus.*

*Geometra mucidaria*, *Hübner. Geom.* pl. 28, f. 148.

*Hyposcotis mucidaria*, *Hübner. Verz. Schm.* 314, 3034.

*Gnophos mucidaria*, *Treit. Schm.* v. 182, 13. *Dup. Lep.* v. 218, pl. 186, f. 5. *Boisd. Ind.* 200, 1593. *Herr.-Sch. Eur. Schm.* iii. 75, 194, pl. 44, f. 266—268. *Bruand, Ann. Soc. Ent. Fr.* 1843, 249, pl. 10, f. 11. *Guen. Phal.* i. 297, 472.

*Gnophos variegata*, *Dup. Lep.* pl. 185, f. 8.

France. Spain. Italy. Styria. Corinthia.

a. Europe. From M. Becker's collection.

#### 4. GNOPHOS VARIEGATA.

*Glaucescens-albida*; *alæ lineis interiore et exteriori denticulatis nigricantibus, spatio intermedio plagisque exterioribus fimbriae testaceis; anticæ basi testaceæ.*

*Gnophos variegata*, *Dup. Lep.* v. 216, pl. 184, f. 4. *Herr.-Sch. Eur. Schm. Sup.* 73, f. 503, 504. *Guen. Phal.* i. 298, 473.

*Gnophos mucidata*, *Frey. Beitr.* pl. 125, f. 3.

South France. Dalmatia.

#### 5. GNOPHOS GLAUCINATA.

*Glaucocinerea*; *alæ conspersæ, lineis exteriori et submarginati albidis undulatis, illa nigro notata, macula discali nigra, fascia subtus exteriori albida; anticæ linea interiore albida nigro notata.*

*Geometra glaucinaria*, *Hübner. Geom.* pl. 28, f. 150.

*Hyposcotis glaucinaria*, *Hübner. Verz. Schm.* 314, 3033.

*Gnophos glaucinata*, *Treit. Schm.* vi. 177, 10. *Frey. Beitr.* pl. 125, f. 1. *Dup. Lep.* v. 214, pl. 184, f. 3, 4. *Boisd. Ind.* 200, 1591. *Herr.-Sch. Eur. Schm.* iii. 75, 192, pl. 12, f. 68, 69. *Guen. Phal.* i. 299, 474.

*Gnophos falconaria*, *Frey. Beitr.* iv. pl. 377, f. 3.

*Gnophos sartaria*, *Herr.-Sch. Eur. Schm.* iii. pl. 12, f. 66, 67.

*Gnophos supinata*, *Lederer, Schm.* 14.

South Europe. Siberia.

#### 6. GNOPHOS SIBIRITA.

*Form.* *Pallide ochracea, G. glaucinatæ affinis; tibiæ longiores, minus incrassatæ; alæ cinereo marmoratæ et strigatæ, lineis tribus dentatis non bene determinatis, linea margineque lato subtus nigricantibus, fascia tenui subtus pallida.*

*Gnophos sibirita*, Guen. *Phal.* i. 300, 475.

Altai.

#### 7. GNOPHOS SARTATA.

*Cinerea* ; *alæ conspersæ, nebulosæ, linea interiore undulata nigricante, linea exterior e punctis nigris, linea submarginali albida fusco marginata, subtus pallidiores margine lato obscuriore guttaque discali nigra.*

*Geometra Sartata*, Hübn. *Geom.* f. 569.

*Gnophos Sartata*, Treit. *Schm.* vi. 175, 9. Frey. *Beitr.* pl. 72, f. 2. Dup. *Lep.* v. 212, pl. 185, f. 1, 2. Boisd. *Ind.* 200, 1586. Herr.-Sch. *Eur. Schm.* iii. 75, 191, pl. 53, f. 324, 325. Guen. *Phal.* i. 301, 477.

Dalmatia. Morea. Turkey.

a—c. Europe. From M. Becker's collection.

#### 8. GNOPHOS FURVATA.

*Fusca* ; *alæ conspersæ, spatio interlineas obscuriore, linea exterior nigra dentata extus pallido diffuse marginata, annulo discali nigro ; antica linea interiore flexa nigra apud costam dilatata.*

———, Klebm, *Beytr.* 222, pl. 27, f. A. De Vill. *Ent. Linn.* ii. 336, 512, pl. 6. f. 11.

*Geometra furvata*, Wien. *Verz.* 108, 1. Fabr. *Mant. Ins.* ii. 199, 120 ; *Ent. Syst.* iii. 2, 170, 148. Ill. N. *Ausg. dess.* i. 430, 1. Bork. *Eur. Schm.* v. 275, 121. Hübn. *Geom.* pl. 27, f. 144.

*Phalæna-Geometra furvata*, Gmel. *ed. Syst. Nat.* i. 5, 2455, 635.

*Scotopterix furvaria*, Hübn. *Verz. Schm.* 313, 3019.

*Gnophos furvata*, Treit. *Schm.* vi. 161, 1. Dup. *Lep.* v. 205, pl. 184, f. 2. Boisd. *Ind.* 199, 1584. Herr.-Sch. *Eur. Schm.* iii. 73, 185. Guen. *Phal.* i. 301, 478.

a, b. Europe. From M. Becker's collection.

c. Switzerland. Presented by Dr. Dowler.

#### 9. GNOPHOS OBSCURATA.

*Nigricante-cinerea* ; *alæ albo irroratæ, linea exterior denticulata annuloque discali nigris.*

*Geometra obscurata*, Wien. *Verz.* 108, 3. Hübn. *Geom.* pl. 27, f. 146. Ill. N. *Ausg. dess.* i. 430, 3.

*Phalæna lividata*, Fabr. *Mant. Ins.* ii. 199, 21 ; *Ent. Syst.* iii. 2, 170, 149.

- Phalæna-Geometra lividata*, *Gmel. ed. Syst. Nat.* i. 5, 2455, 636.  
*Geometra carbonaria*, *Esp. Schm.* v. 127, pl. 25, f. 3, 6, 7.  
*Phalæna pustulata*, *Don. Brit. Ins.* xiii. pl. 463.  
*Scotopterix obscuraria*, *Hübner. Verz. Schm.* 313, 3020.  
*Geometra sordaria*, *Bork. Eur. Schm.* v. f. 114.  
*Geometra pullaria*, *Hübner. Geom.* pl. 27, f. 145. *Haw. Lep. Brit.* 314, 115.  
*Geometra serotinaria*, *Haw. Lep. Brit.* 311, 107.  
*Geometra obscurata*, *Haw. Lep. Brit.* 314, 116.  
*Scotopterix pullaria*, *Hübner. Verz. Schm.* 313, 3021.  
*Gnophos obscurata*, *Treit. Schm.* vi. 168, 5. *Dup. Lep.* v. 208, pl. 185, f. 7. *Boisd. Ind.* 200, 1589. *Herr.-Sch. Eur. Schm.* iii. 74, 190. *Guen. Phal.* i. 302, 479.  
*Gnophos pullata*, *Dup. Lep.* v. 210, pl. 185, f. 6. *Boisd. Ind.* 200, 1588.  
*Charissa obscurata*, *Steph. Ill. Brit. Haust.* iii. 266.  
*Charissa pullaria*, *Steph. Ill. Brit. Haust.* iii. 267.  
*Charissa serotinaria*, *Steph. Ill. Brit. Haust.* iii. 267.  
*Charissa dilucidaria*, *Steph. Ill. Brit. Haust.* iii. 267.  
*a—h.* England. From Mr. Stephens' collection.  
*i, j.* England. From Mr. Turner's collection.  
*k.* England. From Mr. Bouchard's collection.  
*l—p.* England.  
*q, r.* Europe. From M. Becker's collection.

#### 10. GNOPHOS SERRARIA.

*Mas. G. obscuratæ affinis ; antennæ magis flavescens ; alæ pallidiores, minus dentatæ, punctis marginalibus minus approximatis, strigis paucioribus, lineis plus dentatis.*

*Gnophos serraria*, *Ramb. Boisd. Ind.* 200, 1587. *Guen. Phal.* i. 304, 480.

Andalusia.

#### 11. GNOPHOS SEROTINARIA.

*Cinerea ; alæ fusco conspersæ, annulo discali lineaque exteriori denticulata nigris ; antica linea interiore denticulata nigra.*

*Geometra serotinaria*, *Wien. Verz.* 315, 14. *Hübner. Geom.* pl. 28, f. 147. *Ill. N. Ausg. dess.* i. 386, 8, 9; *N. Mag.* ii. 156, 8, 9.

*Ascotis serotinaria*, *Hübner. Verz. Schm.* 313, 3030.

*Gnophos serotinaria*, *Treit. Schm.* vi. 171, 7. *Dup. Lep.* v. 219, pl. 184. *Frey. Beitr.* iv. pl. 353. *Boisd. Ind.* 199, 1577. *Herr.-Sch. Eur. Schm.* iii. 72, 182, pl. 54, f. 328. *Guen. Phal.* i. 304, 481.

South and East Europe.

## 12. GNOPHOS DILUCIDARIA.

*Albido-cinerea*; *thorax nigricante fasciatus*; *alæ conspersæ, lineæ exteriorē denticulata punctis marginalibus annuloque discali nigricantibus*; *antica lineis interiorē et exteriorē interruptis.*

*Geometra dilucidaria*, *Wien. Verz.* 315, 6. *Hübner. Geom.* pl. 27, f. 143. *Ill. N. Ausg. dess.* i. 430, 2, 3.

*Phalæna myopata*? *Fabr. Ent. Syst.* iii. 193, 232.

*Catascia dilucidaria*, *Hübner. Verz. Schm.* 313, 3028.

*Gnophos dilucidaria*, *Treit. Schm.* vi. 173, 8. *Dup. Lep.* v. 221, pl. 186, f. 1. *Everm. Faun. Volg.-Ural.* 377. *Herr.-Sch. Eur. Schm.* iii. 73, 183, pl. 12, f. 71. *Guen. Phal.* i. 305, 482.

*Elophos dilucidaria*, *Boisd. Ind.* 199, 1578.

Mountains and Alps of South and East Europe.]

s. Europe. From M. Becker's collection.

## 13. GNOPHOS MEYERARIA.

*Albida*; *antennæ maris simplices.*

*Gnophos Meyeraria*, *Delaharpe, Lep.* 121, f. 2. *Guen. Phal.* i. 305, 483.

Jura Mountains.

Guenée suggests that this *Gnophos* may be the white variety of *G. pullata*.

## 14. GNOPHOS MENDICARIA.

*G. dilucidariæ affinis, major*; *frons nigricans*; *antennæ ramis minus contiguis*; *tibiæ posticæ longiores, minus incrassatæ, lineis distinctioribus integris apud venas dilatatis.*

*Gnophos mendicaria*, *Herr.-Sch. Eur. Schm. Sup.* 72, f. 491, 493. *Guen. Phal.* i. 306, 484.

*Gnophos dilucidaria*, *Frey. Beitr.*

*Geometra sordaria*? *Thunb.*

*Gnophos crenularia*? *Ramb. Boisd. Ind.* 200, 1592.

Alps Siberia. Lapland?

#### 15. GNOPHOS OPHTHALMICATA.

*Mas. G. dilucidariæ affinis; antennæ simplices; frons nigricans; tibiæ posticæ incrassatæ, breviores, femoribus non longiores; alæ violaceo-cinereæ, conspersæ, lineis interiore et exteriori bene determinatis.*

*Gnophos ophthalmicata, Lederer, Lep. Sibir.* 29, pl. 5, f. 5.  
*Guen. Phal.* i. 306, 485.

Maritime Alps. Mountains of Styria. Siberia.

#### 16. GNOPHOS AMBIGUARIA.

*Cinereo-albida; alæ confertissime conspersæ; alæ linea exteriori denticulata extus albido marginata annuloque discali nigris, linea submarginali albida cinereo notata; anticæ linea interiore cinerea.*

*Gnophos ambiguaria, Dup. Lep.* v. 223, pl. 186, f. 2. *Herr.-Sch. Eur. Schm.* iii. 193, pl. 62, f. 379—381. *Guen. Phal.* i. 307, 486.

*Tephrosia ambiguaria, Boisd. Ind.* 198, 1575.

Digne.

#### 17. GNOPHOS DOLOSARIA.

*Glauescente-cinerea; alæ linea exteriori albida nigricante marginata, puncto discali nigro; anticæ lineis interiore et submarginali.*

*Gnophos dolosaria, Herr.-Sch. Eur. Schm.* iii. 74, 189, pl. 70, f. 430. *Guen. Phal.* i. 307, 487.

Isle of Crete.

#### 18. GNOPHOS PULLATA.

*Cinerascens; frons nigricans; antennæ filiformes, velutinæ; tibiæ posticæ incrassatæ, femoribus vix breviores; alæ dentatæ, annulo discali, linea exteriori dentata, apud venas nigro punctata, linea subtus alba.*

*Geometra pullata*, *Wien. Verz.* 108, 2.

*Gnophos pullata*, *Treit. Schm.* vi. 179, 11. *Herr.-Sch. Eur. Schm.* iii. 74, 188, pl. 12, f. 70. *Guen. Phal.* i. 308, 488.

s—k. England. From Mr. Stephens' collection.

l—q. England. From Mr. Turner's collection.

r—v. England.

#### 19. GNOPHOS CANITIARIA.

*Albida*, *G. pullatæ*, var. *impectinaris simillima*; *antennæ maris valde pectinatæ*; *alæ conspersæ, lineis non bene determinatis, linea exteriori albo marginata, annulo discali sat magno.*

*Gnophos canitaria*, *Guen. Phal.* i. 309, 489.

Maritime Alps.

#### 20. GNOPHOS PULLULARIA.

*G. pullatæ similis, glauco-cinerea, saturatior, lineis distinctioribus integris, linea alba subtus nulla*; *antica striga discali.*

*Gnophos pullularia*, *Herr.-Sch. Eur. Schm. Sup.* 72, f. 498, 499.

*Guen. Phal.* i. 309, 490.

*Gnophos pullaria*, var., *Lederer.*

#### 21. GNOPHOS ONUSTARIA.

*G. pullatæ affinis; antennæ crassiores; alæ pallidiores, cinereo marmoratæ et punctatæ, lineis valde dentatis, linea submarginali bene determinata, annulo discali distincto, linea alba subtus nulla.*

*Gnophos onustaria*, *Herr.-Sch. Eur. Schm. Sup.* 73, f. 496, 497.

*Gnophos oneraria*, *Guen. Phal.* i. 310, 491.

Amasia.

#### South America.

#### 22. GNOPHOS? DIFFINIARIA.

*Rufescente-ochracea; alæ subangulatæ, nigro transverse strigatæ, linea exteriori undulata lutea nigro marginata, linea media nigricante; antica linea interiori luteo nigro marginata.*

*Gnophos diffiniaria*, *Herr.-Sch. Exot. Schm.* pl. 65, f. 372.

Venezuela.

## 23. GNOPHOS ? ARMATARIA.

*Cervino-rufescens* ; alæ valde dentatæ, extus nebulosæ, linea exteriore nigra undulata subduplicata, fimbria alba, dentibus nigris, subtus late ochraceæ fascia exteriori lata diffusæ purascente ; anticæ striga costali pallida, linea interiori strigæ discali nigris.

*Gnophos armataria*, Herr.-Sch. Exot. Schm. pl. 65, f. 373, 374.

## Hindostan.

The species of this region have been divided into two groups, the first of which is peculiar to Hindostan, and the second is a European form.

## Group 1.

## 24. GNOPHOS EOLARIA.

Mas. *Fusco-cinerea* ; antennæ late pectinatæ ; alæ testaceo tinctæ sericeæ, dentatæ, lineis nebulosis indistinctis, linea exteriori tenuissima dentata apud venas punctata ; anticæ costæ spatiumque medio pallide ochraceo-cinereis strigatis, macula costali nigricante.

*Gnophos eolaria*, Guen. Phal. i. 294, 466.

North Hindostan.

## 25. GNOPHOS VENTRARIA.

Fœm. *Nigricante-fusca* ; abdomen supra nigrum ; alæ linea media nigricante tenui undulata non dentata, spatio interiori lineam versus ochraceo vario transverse strigato, macula discali trigona ochracea, litura discali recta indistincta, spatio exteriori nigro-fusco, linea submarginali dentata, spatio marginali badio.

*Gnophos ventraria*, Guen. Phal. i. 294, 467.

Silhet.



## Group 3.

## 26. GNOPHOS MISCELLARIA.

*Mas.* Testaceo-cinerea; antennae subpectinatae; alae flavescens-fusco variae et marmoratae, lineis vis conspicuis, linea submarginali pallida dentata interrupta, puncto discali nigro, subtus cinerea.

*Gnophos miscellaria*, Guen. *Phal.* i. 297, 470.

Hindustan? Australia?

## 27. GNOPHOS ACCIPITRARIA.

*Flavescens-cinerea*; tibia postica longa, incrassata; alae nebulosae, dentatae, lineis obscurioribus dentatis, litura fuscescente maculaque pallida exterioribus, linea submarginali albida dentata, subtus testaceo-albae lituris nigricantibus.

*Gnophos accipitraria*, Guen. *Phal.* i. 300, 476.

Hindustan.

## ✓ 28. GNOPHOS DISPUNCTATA.

*Mas et fœm.* Pallide cinerea, gracilis; pedes graciles; tibia postica vix incrassata; alae amplae, fuscescenti-cinereo transverse conspersae, lineis interiore et exteriori obscure fuscis denticulatis undulatis, hac extus albido marginata, linea submarginali albida angulosa, punctis marginalibus obscure fuscis, subtus albida linea exteriori interrupta fasciaque submarginali excavata.

*Male and female.* Pale cinereous, slender. Legs slender; hind tibiae hardly incrassated. Wings ample, thickly and transversely speckled with brownish cinereous; interior and exterior lines dark brown, denticulated, undulating, the latter whitish-bordered on the outer side; submarginal line whitish, zigzag; marginal points dark brown; under side whitish, with brown markings, which consist of an undulating exterior line, which is attenuated and interrupted hindward, of a much excavated submarginal band, and of a discal streak. Length of the body 9 lines; of the wings 22—24 lines.

a, b. North Hindostan. From Capt. Boys' collection.

## Australia.

## 29. GNOPHOS DESTINATARIA.

**Mas.** *Ochræo-flava*; *antennæ pectinatæ*; *tibiæ posticæ subincrassatæ*; *alæ dentatæ cinereo-fusco conspersæ, lineis nigro-fuscis indistinctis, maculis costalibus bene determinatis, linea submarginali interrupta maculari, litura discali distincta.*

*Gnophos destinataria*, *Guen. Phal. i. 297, 471.*

Tasmania.

## Genus 26. DASYDIA.

**Corpus gracile.** **Palpi remoti, subascendentes, villososquamosi, frontem superantes.** **Tegulæ remotæ.** **Tibiæ posticæ femoribus plus duplo longiores, calcaribus remotis; tarsi subspinosi.** **Mas.**—*Antennæ sæpissime pectinatæ, ramis subclavatis.* *Alæ amplæ, sericæ, nitentes; anticæ apice productæ.* **Fœm.**—*Minor.* **Abdomen crassum, latum, depressum, lateribus fimbriatis.** **Alæ breviores, magis rotundatæ.**

*Scotopterix, Catascia et Orphne, Hübn. Verz. Schm. 313, 314.*

*Dasydia, Guen. Cat. Dup. 281; Phal i. 310; Lederer.*

*Psodos, p., Treit.; Herr.-Sch.*

*Cleogene et Elophos, Boisd.*

*Charissa, p., Steph,*

**Body slender.** **Palpi slightly ascending, villose-squamous, extending beyond the front, apart from each other.** **Tegulæ of the thorax remote from each other.** **Hind tibiæ more than twice the length of the femora, with the spurs far apart; tarsi with minute spines.** **Male.**—*Antennæ pectinated, with subclavate branches, rarely simple.* **Wings ample, silky, shining, entire or nearly so.** **Fore wings elongate at the tips.** **Female.**—*Smaller.* **Abdomen thick, broad, depressed, fringed on each side.** **Wings shorter and more rounded than those of the male.**

## 1. DASYDIA OBFUSCATA.

*Fuscescente-cinerea; alæ albido conspersæ, linea exteriori dentata annuloque discali nigro-fuscis, linea submarginali punctulari albida; antica linea interiore dentata nigro-fusca.*

*Geometra obfuscata? Wien. Verz. 108, 4. Ill. N. Ausg. dess. i. 431, 4.*

- Geometra nitelaria*? *Esp. Schm.* v. pl. 52, f. 2.  
*Geometra canaria*, *Hübner. Geom.* pl. 66, f. 344.  
*Geometra limosaria*, *Hübner. Geom.* pl. 69, f. 360. *Esp. Schm.* v. pl. 52, f. 3.  
*Scotopterix limosaria*, *Hübner. Verz. Schm.* 313, 3023.  
*Scotopterix canaria*, *Hübner. Verz. Schm.* 313, 3024.  
*Psodos obfuscata*, *Treit. Schm.* vi. 164, 3. *Dup. Lep.* v. 225, pl. 185, f. 5. *Herr.-Sch. Eur. Schm.* iii. 76, 195.  
*Charissa operaria*, *Steph. Ill. Brit. Haust.* iii. 267. *Curt. Brit. Ent.* pl. 105.  
*Psodos canaria*, *Frey. Beitr.* iv. pl. 377, f. 1, 2.  
*Elophos obfuscata*, *Boisd. Ind.* 199, 1582.  
*Dasydia obfuscata*, *Guen. Phal.* i. 311, 492.  
*a.*—*d* England. From Mr. Stephens' collection.  
*e.* England.

## 2. DASYDIA OPERARIA.

*Albido-cinerea; antennæ maris pectinatæ; alæ nigro conspersæ, litura discali lineaque exteriori denticulata nigris, hac extus albido marginata, linea submarginali diffusa albida, punctis marginalibus nigris; antica linea interiore nigra.*

- Geometra operaria*, *Hübner. Geom.* pl. 69, f. 359.  
*Catascia operaria*, *Hübner. Verz. Schm.* 313, 3027.  
*Gnophos operaria*, *Treit. Schm. Sup.* x. 181. *Dup. Lep.* v. 227, pl. 186, f. 3. *Herr.-Sch. Eur. Schm.* iii. 73, 184. *Wocke, Ent. Bresl.* pl. 4, f. 12.  
*Elophos operaria*, *Boisd. Ind.* 199, 1581.  
*Dasydia operaria*, *Guen. Phal.* i. 312, 493.  
 Alps of Styria.

## 3. DASYDIA SPURCARIA.

*D. operariæ affinis, minor; alæ magis nebulosæ et marmoratæ, lineis indeterminatis, puncto discali non pupillari.*

- Psodos spurcaria*, *Delaharpe*, 116, f. 1.  
*Dasydia spurcaria*, *Guen. Phal.* i. 312, 494.  
 Mont Rosa.

## 4. DASYDIA ANDERREGGARIA.

*D. Zellerariæ similis ; alæ olivaceo-cinereæ, conferte strigatæ, vasis ochraceo tinctis, lineis interiore et exteriori concisis obscuris dentatis, hac intus ochraceo marginata, gutta discali rotunda subpupillari.*

*Psodos Anderreggaria, Delaharpe, 125, f. 3, 4.*

*Dasydia Anderreggaria, Guen. Phal. i. 313, 495.*

Alps of the Valais.

## 5. DASYDIA ZELLERARIA.

*Cinerea ; alæ conspersæ, linea exteriori obscuriore undulata extus albido diffuse marginata ; antica linea interiore obscuriore.*

*Psodos Zelleraria, Frey. N. Britr. pl. 192, f. 2, 3. Herr.-Sch. Eur. Schm. iii. 72, 181, pl. 10, f. 57, 58. Delah. Lep. 117.*

*Dasydia Zelleraria, Guen. Phal. i. 314, 496.*

Alps of Bavaria, of Tyrol and of the Grisons.

## 6. DASYDIA CŒLIBARIA.

*Cinerea ; alæ fœm. brevissimæ, linea transversa subapicali nigra.*

*Psodos cœlibaria, Herr.-Sch. Eur. Schm. Sup. 72, pl. 68, f. 421.*

*Dasydia cœlibaria, Guen. Phal. i. 314, 497.*

Alps of Tyrol. Corinthia.

## 7. DASYDIA TORVARIA.

*Saturate fusca ; antennæ maris pectinatæ ; alæ linea exteriori undulata nigra extus pallidiore marginata, fascia subtus sub marginali flavescente ; antica striga discali lineaque interior nigris.*

*Geometra torvaria, Hübn. Geom. pl. 71, f. 366—369.*

*Geometra tenebraria, Esp. Schm. v. pl. 51, f. 6.*

*Orphne torvaria, Hübn. Verz. Schm. 314, 3037.*

*Psodos torvaria, Treit. Schm. vi. 256, 2. Dup. Lep. v. 532, pl. 268 f. 4, 5. Herr.-Sch. Eur. Schm. iii. 103, 279. Delah. Lep. 168*

*Cleogene torvaria, Boisd. Ind. 178, 1414.*

*Dasydia torvaria, Guen. Phal. i. 315, 498.*

*Geometra horridaria, Hübn. Geom. pl. 28, f. 149.*

*Orphne horridaria*, *Hübner. Verz. Schm.* 314, 3038.

*Psodos innuptaria*, *Herr.-Sch. Eur. Schm. Sup.* 73, f. 608.

Mountains of France, of Switzerland and of Italy.

#### 8. DASYDIA SEPTARIA.

*Mas.* *D. torvaria* affinis; alæ plumbeo-cinereæ, lineis vix conspicuis; anticæ apice productæ, costâ concava albo liturata, margine exteriori obliquo.

*Dasydia septaria*, *Guen. Phal.* i. 316, 499.

#### Genus 27. PSODOS.

Corpus gracile, villosum. Proboscis distincta. Palpi ascendentes, hirsuti. Antennæ maris breves, filiformes, velutinæ, non ciliatæ. Abdomen maris carinatum, sœm. incrassatum. Pedes robusti; tibiæ posticæ non incrassatæ, calcaribus longis. Alæ integre, spissæ, fimbria densa; anticæ subacutæ.

*Psodos*, *Treit.*; *Dup.*; *Steph.*; *Boisd.*; *Curt.*; *Herr.-Sch.*; *Leder.*; *Guen. Phal.* i. 316.

*Orphne et Parascotia*, p., *Hübner. Verz. Schm.* 314.

Body slender, villose. Proboscis distinct. Palpi ascending, hirsute. Legs stout; hind tibiæ non incrassated, with long filiform spurs. Wings entire, stout; fringe broad. Fore wings somewhat acute. *Male*.—Antennæ short, filiform, velvety, without ciliæ. Abdomen keeled, slightly tumid at the tip. *Female*.—Abdomen thick, obtuse at the tip.

#### 1. PSODOS HORRIDARIA.

*P. trepidaria* simillima; alæ magis unicolores et fuliginosæ, lituris marginalibus vix ullis, fascia marginali subtus latiore.

*Geometra horridaria*, *Wien. Verz.* 100, 7. *Fabr. Ent. Syst.* iii. 2, 149, 73. *Bork. Eur. Schm.* v. 203, 84. *Hübner. Geom.* pl. 60, f. 312, 590. *Ill. N. Ausg. dess.* i. 379, 7; *N. Mag.* ii. 154, 7.

*Orphne horridaria*, *Hübner. Verz. Schm.* 314, 3038.

*Psodos horridaria*, *Treit. Schm.* i. 258, 3. *Dup. Lep.* v. 534, pl. 208, f. 2. *Boisd. Ind.* 230, 1936. *Herr.-Sch. Eur. Schm.* iii. 103, 280. *Delah. Lep.* 169. *Guen. Phal.* i. 318, 501.

Mountains of South and of East Europe.

## 2. PSODOS TREPIDARIA.

*Nigricante-cuprea ; alæ cinereo sabulosæ, lineis denticulatis nigricantibus.*

*Geometra trepidaria*, Hübn. *Geom.* pl. 66, f. 343.

*Parascotia trepidaria*, Hübn. *Verz. Schm.* 314, 3036.

*Psodos trepidaria*, *Treit. Schm.* vi. 260, 5. *Dup. Lep.* v. 535, pl. 208, f. 1. *Steph. Ill. Brit. Haust.* iii. 144. *Herr.-Sch. Eur. Schm.* iii. 103, 281. *Boisd. Ind.* 230, 1937. *Delah. Lep.* 170. *Guen. Phal.* i. 318, 502.

*Phalæna hirtata*? *Fabr. Ent. Syst.* iii. 181, 187.

*Psodos chaonaria*, *Frey. Beitr.* pl. 86, f. 3.

*a, b.* England. Presented by S. Stevens, Esq.

*c—g.* England. From Mr. Stephens' collection.

*k, l.* England.

*m, n.* Loch Rannoch. From Mr. Foxcroft's collection.

*o, p.* Europe. From M. Becker's collection.

## 3. PSODOS ALTICOLARIA.

*P. trepidariæ simillima ; alæ linea subtus flexuosa nigra, fascia marginali subtus alba nigro interlineata ; anticæ striga discali subpupillata.*

*Psodos alticolaria*, *Mann, Zool. Bot. Ver.* *Guen. Phal.* i. 320, 503. Alps of Tyrol.

## Genus 28. TORULA.

Corpus sat robustum. Proboscis valida. Palpi pilosi, sub-ascendentes, caput superantes ; articulus 3us conicus. Antennæ maris simplices, filiformes, velutinæ. Tibiæ posticæ non incrassatæ, calcaribus quatuor longis. Alæ latæ ; anticæ apice rotundatæ.

*Psodos*, *p.*, *Treit.* ; *Dup.* ; *Steph.* ; *Curt.* ; *Guen.*

*Torula*, *Boisd. Ind.* 230 ; *Herr.-Sch.*

Body rather stout. Proboscis robust. Palpi pilose, slightly ascending, extending rather beyond the head ; third joint conical. Antennæ of the male simple, filiform, velvety. Legs moderately long and stout ; hind tibiæ not incrassated, with four long spurs. Wings broad. Fore wings rounded at the tips.

## 1. TORULA ALPINATA.

*Cupreo-nigra* ; *ala fascia exteriora lata crocea.*

*Geometra quadrifaria*, *Sulz. Gesch.* pl. 23, f. 4.

———, *De Vill. Ent. Linn.* ii. 371, 591, pl. 6, f. 16.

*Geometra alpinata*, *Wien. Verz.* 115, 14. *Fuessl. N. Mag.* ii. 337, 154. *Schr. Faun. Boic.* ii. 2, 51, 1688. *Hübner. Geom.* pl. 38, f. 197. *Ill. N. Ausg. deus.* i. 470, 14. \*

*Phalæna equestrata*, *Fabr. Ent. Syst.* iii. 2, 179, 178. *Schw. Beitr.* 164, pl. 31, f. 5. *Bork. Eur. Schm.* v. 480, 235. *Haw. Lep. Brit.* 345. *Exp. Schm.* v. pl. 50, f. 1.

*Psodos equestrata*, *Curt. Brit. Ent.* pl. 424. *Dup. Lep.* v. 580, pl. 208, f. 3. *Delah. Lep.* 171.

*Psodos alpinata*, *Treit. Schm.* vi. 255, 1. *Steph. Ill. Brit. Haust.* iii. 144. *Guen. Phal.* i. 317, 500.

*Torula equestrata*, *Boisd. Ind.* 230, 1935. *Herr.-Sch. Eur. Schm.* iii. 104, 282.

a—d. Europe. From M. Becker's collection.

e. Hungary. From Mr. Milne's collection.

## Genus 29. DICHROMODES.

Corpus gracile. Oculi extantes. Proboscis gracilis. Palpi supra squamosi, subtus hirsuti, articulis indistinctis. Antennæ maris pectinatæ. Abdomen longum. Pedes graciles, sat longi; tibiæ posticæ longissimæ, non incrassatæ, calcaribus longis approximatis. Alæ late fimbriatæ.

*Dichromodes*, *Guen. Phal.* i. 320.

Body slender. Eyes prominent. Proboscis slender. Palpi closely conjoined, squamous above, hirsute beneath; joints indistinct. Antennæ of the male moderately pectinated; branches in a single row. Abdomen long; valves prominent, beset with squamous hairs. Legs slender, rather long; hind tibiæ very long, not incrassated; spurs long, slender, approximate. Wings festooned, with a long fringe.

## 1. DICHROMODES AINARIA.

*Mas. Nigro-cinerea* ; *alæ anticae lineis tribus parallelis dentatis undulatis, 3us intus umbrata, puncto discali* ; *posticæ pullide flavæ, cinereo marginatæ.*

*Dichromodes ainaria*, *Guen. Phal.* i. 321, 504, pl. 3, f. 5.

Tasmania.

2. *DICHROMODES DIVERGENTARIA*.

**Fœm.** *D. ainarie simillima, minor; alæ anticæ saturatiore, linea 2a valde flexa, subtus pallide fulvescentes cinereo marginatæ; posticæ sordide cupreo-flavæ, striga discali linea umbrata margineque nigriscentibus.*

*Dichromodes divergentaria, Guen. Phal. i. 321, 505.*

Australia.

3. *DICHROMODES DIASEMARIA*.

**Mas.** *D. ainarie affinis, alæ anticæ obscuriores, striga discali lineaque 2a non contiguæ; posticæ fumoso-fulvescentes, marginatæ.*

*Dichromodes diasemaria, Guen. Phal. i. 321, 506.*

Tasmania.

Genus 30. *PYGMÆNA*.

Corpus gracile. Proboscis distincta. Palpi porrecti, caput superantes; articulus 3us conicus. Antennæ breviusculæ. Tibiæ posticæ fusiformes, calcaribus quatuor approximatis. **Mas.**—Palpi pilosissimi. Antennæ pectinatæ, ramis spatulatis. Alæ amplæ; anticæ apice rotundatæ. **Fœm.**—Antennæ crenulatæ. Alæ parvæ.

*Psodos, p., Treit.; Dup.*

*Schidax, Hübn. Verz. Schm. 315.*

*Pygmæna, Boisd. Ind. 230. Guen. Phal. i. 322.*

*Colutogyna, Lederer.*

Body slender. Proboscis distinct. Palpi porrect, extending somewhat beyond the head; third joint conical. Antennæ rather short. Hind tibiæ fusiform, with four approximate spurs. **Male.**—Palpi very pilose. Antennæ pectinated; branches stout, spatulate, moderately long. Wings ample. Fore wings rounded at the tips. **Female.**—Antennæ crenulate. Wings small.

1. *PYGMÆNA VENETARIA*.

**Mas.** — *Nigro-cinerea.* **Fœm.** — *Albido-cinerea; alæ fusco conspersæ.*

*Geometra fuscaria, Thunb.*

*Geometra venetaria, Hübn. Geom. pl. 64, f. 329.*

*Schidax venetaria, Hübn. Verz. Schm. 315, 3040.*



*Pseudos venetaria*, *Treit. Schm.* vi. 259, 4. *Dup. Lep.* v. 536, pl. 208, f. 6. *Herr.-Sch. Eur. Schm.* iii. 103, 278, pl. 72, f. 444, *Pygmaena venetaria*, *Boisd. Ind.* 230, 1939. *Guen. Phal.* i. 322, 507.

*Pseudos canitiaria*, *Frey. Beitr.* pl. 125, f. 4.

*Colutogyna fuscaria*, *Lederer.*

Alps of France and of Switzerland. Lapland.

### Genus 31. EXELIS.

*Mas.* Corpus squamosum, vix robustum. Proboscis brevis. Palpi crassi, squamosi, frontem vix superantes, articulis indistinctis. Antennæ pectinatæ. Abdomen apice quadratum subtrifidum. Pedes squamosi, subplani; tibiæ posticæ femoribus vix longiores, calcaribus quatuor approximatis robustis. Alæ integræ, spissæ; anticae oblongæ.

*Exelis*, *Guen. Phal.* i. 323.

*Male.* Body squamous, hardly stout. Proboscis short. Palpi thick, squamous, hardly extending beyond the front; joints indistinct. Antennæ broadly pectinated. Abdomen quadrate and subtrifid at the tip. Legs squamous, slightly flattened; hind tibiæ hardly longer than the femora, with two pairs of stout approximate spurs. Wings entire, robust; fringe long. Fore wings oblong.

#### 1. EXELIS PYROLARIA.

*Mas.* *Violaceo-cinerea*; alæ oblongæ; anticae lineis tribus nigris, 1a arcuata, 2a 3aque sinuatis valde approximatis, puncto discali, linea submarginali nulla; posticæ bilineatæ.

*Exelis pyrolaria*, *Guen. Phal.* i. 324.

North America.

### Genus 32. MNIOPHILA.

Corpus gracile. Proboscis gracilis, brevissima. Palpi filiformes, disjuncti, brevissimi. Antennæ maris pectinatæ. Thorax rotundatus. Pedes breves; tibiæ posticæ bicalcaratæ, femoribus vix longiores. Alæ integræ; anticae oblongæ, pulverulentæ; posticæ rotundatæ, pallidiores, vix lituratæ, alas posticas superantes.

*Tephronia*, *Hübner. Verz. Schm.* 317; *Herr.-Sch.*; *Lederer.*

*Mniophila*, *Boisd. Ind.* 200; *Dup.*; *Guen. Phal.* i. 324.

Body slender. Proboscis slender, very short. Palpi filiform, very short, apart from each other. Antennæ of the male pectinated to the tips; the branches regularly decreasing in length. Thorax round. Legs short; hind tibiæ hardly longer than the femora, with one pair of spurs. Wings entire. Fore wings oblong, pulverulent. Hind wings rounded, paler than the fore wings, with hardly any markings, extending beyond the abdomen.

### 1. MNIOPHILA CINERARIA.

*Obscure cinerea; thorax nigro fasciatus; alæ punctis marginalibus nigris; anticæ fasciis diffusis obscurioribus, lineis interiore et exteriori dentatis nigris; posticæ albidæ, linea exteriori e punctis nigris.*

———, *De Vill. Ent. Linn.* iv. 497.

*Geometra sepiaria?* Hüfn. *Berl. Mag.* iv. 5, 516, 23. *Naturf.* xi. 69, 23.

*Geometra cineraria*, *Wien. Verz.* 100, 10. *Fabr. Ent. Syst.* iii. 146, 60. *Hübner. Geom.* pl. 32, f. 171. *Ill. N. Ausg. dess.* i. 381, 10.

*Tephronia cineraria*, *Hübner. Vers. Schm.* 318, 3071, 93.

*Boarmia cineraria*, *Treit. Schm.* vi. 227, 17.

*Boarmia corticaria*, *Dup. Lep.* iv. 388, pl. 162, f. 3, 4.

*Mniophila corticaria*, *Boisd. Ind.* 200, 1595.

*Mniophila cineraria*, *Herr.-Sch. Eur. Schm.* iii. 93, 256. *Guen. Phal.* i. 325, 509.

*Geometra corticaria?* *Wien. Verz.* 97. *Hübner. Geom.* f. 167.

*Mniophila corticaria?* *Herr.-Sch. Eur. Schm.* iii. 93, 257, pl. 35, f. 211, 213. *Delah.* 158.

*Tephronia cremiaria?* *Frey. Beitr.* iii. pl. 252.

*Mniophila corticaria*, *Guen. Phal.* i. 326, 510.

Guenée supposes that *M. cineraria* and *M. corticaria* are identical.

a. Swansea.

### 2. MNIOPHILA CARIERARIA.

*Cinerea; alæ linea exteriori undulata albida; anticæ nigro-cinereæ, linea interiore undulata albida; fimbria albida nigro notata.*

*Mniophila cineraria*, *Dup. Lep.* iv. 388, pl. 162, f. 5. *Boisd. Ind.* 200, 1594.

*Euphronia carieraria*, Herr. Sch. Eur. Schm. iii. 93, 258, pl. 35, f. 214.

*Euphronia carieraria*, Guen. Phal. i. 326, 511.

South France.

### Genus 33. CERTIMA.

*Mas.* Corpus robustum. Proboscis longa, valida. Palpi faciles, ascendentes, articulo 3o brevi. Antennæ validæ, simpli-  
ces. Thorax pilis longissimis dense vestitus. Pedes robusti; tibiæ  
posticæ subincrassatæ, calcaribus apicalibus parvis. Alæ amplæ,  
piceæ, concolores, lituris non diversis; anticæ margine anteriore  
obliquo.

*Male.* Body stout. Proboscis long, robust. Palpi slender,  
extending a little beyond the head, obliquely ascending; third  
joint about one-fourth of the length of the second. Antennæ  
short, simple. Thorax densely clothed with very long hairs.  
Legs stout; hind tibiæ slightly incrassated; apical pair of spurs  
short. Wings ample, stout, alike in colour and with like markings.  
Fore wings almost rectangular at the tips; exterior border very  
slightly oblique.

#### 1. CERTIMA PERMUTANS.

*Mas.* Testacea; alæ nigro conspersæ, lineis exteriori et submar-  
ginali denticulatis obscurioribus subobsoletis, punctis submar-  
ginalibus nigricantibus albo notatis, puncto discali nigro;  
antica linea interiore e punctis tribus nigris.

*Male.* Testaceous. Wings very minutely speckled with  
black; exterior and submarginal lines denticulated, a little darker,  
almost obsolete; the latter accompanied by blackish white-marked  
points; exterior border a little darker than the rest of the wing;  
basal point black. Fore wings with three black points indicating  
the interior line; under side with a large diffuse exterior blackish  
patch. Length of the body  $6\frac{1}{2}$  lines; of the wings 17 lines.

*h. b.* Bogotá. From Mr. Stevens' collection.

### Genus 34. BARGOSA.

*Mas et fem.* Corpus robustum. Proboscis valida. Palpi  
faciles, ascendentes. Antennæ maris late pectinatæ, apices versus  
filiformes. Abdomen carinatum, lateribus fasciculatis. Pedes

robusti; tibiæ posticæ non incrassatæ. Alæ latæ, spissæ; antix vix acutæ.

*Male and female.* Body stout. Proboscis robust. Palpi broad, ascending; third joint very short or moderately long. Antennæ of the male broadly pectinated to two-thirds of the length. Abdomen keeled, crested on each side in the male. Legs stout. Hind tibiæ not incrassated; spurs long, except one of the apical pair, which is short. Wings broad, stout, not long. Fore wing hardly acute; exterior border hardly or moderately oblique.

### 1. BARGOSA CHANDUBIJA.

*Mas et forma.* *Rufescente-cervina, subtus albido-testaceo; nigro substrigata, lineis duabus ferrugineis subrectis, gutta discali fasciæque submarginali subtus nigris; antix plaga subapicali nigra.* *Mas.*—*Ala antix puncto discali nigro.* *Fœm.*—*Caput inter antennæ album; alæ antix oculo discali; postica gutta discali albo notata.*

*Male and female.* Reddish fawn-colour, whitish testaceous beneath. Wings minutely and transversely black-streaked, with two nearly straight ferruginous lines; interior line contiguous with the black discal mark; marginal points black, very minute; under side with a blackish dot and a blackish submarginal band. Fore wings with a black subapical patch. *Male.*—Head cinereous between the antennæ. Wings with the discal mark forming a black point in the fore wings, obsolete in the hind wing. *Female.*—Head white between the antennæ, which are also white at the base. Discal mark forming an ocellus in the fore wing and a white-marked dot in the hind wings. Length of the body 12 lines; of the wings 12 lines.

*a, b.* Ceylon. Presented by Dr. Templeton.

The male of the preceding species differs so much from the female that it was mentioned as a distinct species in the list of Ceylon insects lately published. The two following species are very closely allied to *B. Chandubija*, and are perhaps merely subspecies or local varieties.

## 2. BARGOSA DISTRACTA.

**Mas.** *Rufescente-cervina, subtus albido-testacea; alæ nigro transverse strigatæ, lineis duabus subrectis, 1a fusca, 2a et punctis marginalibus subobsoletis, gutta discali nigra, fascia subtus submarginali nigricante; anticæ plaga subapicali nigra.*

**Male.** Reddish fawn-colour, whitish testaceous beneath. Head cinereous between the antennæ. Wings minutely and transversely black-streaked, with two nearly straight lines; interior line brown, contiguous to the black discal dot; exterior line and marginal points almost obsolete; under side with a blackish discal dot and a blackish submarginal band. Fore wings with a black subapical patch. Length of the body 5 lines; of the wings 12 lines.

The third joint of the palpi is a little shorter than in *B. Chandubiya*, and the exterior border of the fore wings is less oblique.

**a. Punjaub.** Presented by Gen. Hearsay.

## 3. BARGOSA CHACORACA.

**Fœm.** *Cinereo-cervina, subtus pallida; caput vertice albo; palporum articulus 3us apice albidus, 2i dimidio brevior; alæ nigricante conspersæ, fasciis tribus cervinis vagis interruptis connexis, macula subtus discali nigricante subrotunda, fascia subtus marginali lata fusca; anticæ subtus gutta basali fusca.*

**Female.** Cinereous fawn-colour, whitish testaceous beneath. Head white between the antennæ. Palpi ascending; third joint filiform, whitish at the tip, less than half the length of the second. Legs slender. Wings blackish-speckled, with three irregular interrupted and partly connected fawn-coloured bands; under side with a blackish nearly round discal spot, and with a broad brown marginal band. Fore wings beneath with a brown discal dot near the base. Hind wings beneath with a brown dot near the base. Length of the body 5 lines; of the wings 12 lines.

**a. Ceylon.** Presented by Dr. Templeton.

## Genus 35. GAZENA.

*Fœm.* Corpus robustum. Proboscis brevis. Palpi breves, graciles, porrecti, caput non superantes, articulo 3o minimo. Antennæ simplices. Abdomen alas posticas non superans. Pedes validi, non pilosi. Alæ latiusculæ, concolores, lituris non diversis.

*Female.* Body stout. Proboscis short. Palpi short, slender, porrect, not extending beyond the head; third joint extremely minute. Antennæ simple. Abdomen not extending beyond the hind wings. Legs stout, not pilose; apical spurs rather shorter than the other pair. Wings rather broad. Fore wings nearly rectangular at the tips; exterior border slightly convex, moderately oblique. Hind wings like the fore wings in colour and markings.

## 1. GAZENA DIVULSA.

*Fœm.* *Fusca, subtus cinerea; thorax albo conspersus; abdomen nigricans, apice testaceum, segmentis albido marginatis; alæ rufæ alboque conspersæ, lineis tribus fuscis nigro punctatis; linea submarginali alba angulosa, fascia subtus marginali lata fuscescente.*

*Female.* Brown, cinereous beneath. Thorax speckled with white. Abdomen blackish, testaceous at the tip; hind borders of the segments whitish. Wings with red and white speckles, the latter forming incomplete bands; interior, middle and exterior lines brown, with black points on the veins; submarginal line white, zigzag; marginal points brown; under side with a broad brownish marginal band. Length of the body 5 lines; of the wings 14 lines.

Rio Janeiro. In Mr. Fry's collection.

## Genus 36. PSYRA.

*Mas.* Corpus sat robustum. Proboscis distincta. Palpi breves, lati, ascendentes, articulo 3o minimo. Antennæ simplices. Abdomen longiusculum. Pedes graciles; tibiæ posticæ elongatæ, anticæ acutæ, subfalcatæ, margine exteriori angulato.

*Male.* Body moderately stout. Proboscis distinct. Palpi short, broad, ascending; third joint extremely minute. Antennæ simple. Abdomen rather long. Legs slender; hind tibiæ very

much longer than the femora, with four rather long spurs. Wings ample. Fore wings acute, subfalcate; exterior border distinctly bent. Hind wings with the exterior border hardly bent.

### 1. *PSYRA CUNEATA*.

*Mas.* *Albido-flava; palpi nigricantes, apice albido-flavi; alæ cinereo subconspersæ, fascia subtus submarginali pallide fusca; anticæ maculis tribus nigris, la 2aque trigonis posticis, 3a anteriore elongata extus excavata.*

*Male.* Whitish yellow. Palpi blackish, with whitish yellow tips. Wings indistinctly cinereous-speckled; under side with a pale brown submarginal band. Fore wings with distinct black marginal points, with a few black discal points, and with three black spots; first and second spots triangular, by the interior border; second more than twice the length of the first; third spot near the exterior border, elongated, deeply excavated on the outer side. Hind wings with two indistinct brownish bands; the second submarginal, much broader than the other one. Length of the body 6 lines; of the wings 16 lines

*a.* North Hindostan. Presented by Major Parry.

### Genus 37. *RHUMA*.

*Mas.* Corpus robustum. Proboscis valida. Palpi lati, oblique ascendentes, articulo 3o conico brevi. Antennæ robustæ, subserratæ. Abdomen valde cristatum. Pedes valida; femora postica fimbriata; tibiæ posticæ femoribus fere duplo longiores, vix incrassatæ. Alæ latæ, spissæ.

*Male.* Body stout. Proboscis robust. Palpi broad, obliquely ascending, extending a little beyond the head; third joint conical, not more than one-fourth of the length of the second. Antennæ stout, minutely serrated. Abdomen crested along nearly the whole length; third and fourth segments with very high crests. Legs stout; hind femora fringed; hind tibiæ nearly twice the length of the femora, hardly incrassated; apical spurs shorter than the other pair. Wings broad, stout, not long; exterior border convex. Fore wings somewhat rounded at the tips. Hind wings densely fringed along the interior border.

## 1. RHUMA SUBAURATA.

**Mas.** *Albida*; *frons binotata*; *thorax olivaceo fasciatus*; *abdomen schistaceo-cinereum*, *cristis olivaceis*, *guttis quatuor nigris*; *ala schistaceo-cinerea*, *venis auratis*, *lineis duabus nigris punctularibus*, *linea submarginali fusca intus diffusa extus albo submarginata*, *annulo discali bene determinato*, *subtus læte lutea macula discali fasciæque lata submarginali nigris*; *antice spatio medio albo*.

**Male.** Whitish, pale yellow beneath. Front with two olive-green dots. Thorax with olive-green bands. Abdomen slaty cinereous, with olive-green crests and with four black dots. Fore tibia and anterior tarsi with white bands. Wings slaty cinereous, gilded along the veins; interior and exterior lines distinguished by elongated black points on the veins; submarginal line brown, diffuse on the inner side, partly bordered with white on the outer side; fringe dotted; discal ringlet very distinct; under side bright luteous, with a black discal spot and a broad black submarginal band. Fore wings with the middle space whitish; under side blackish about the border. Hind wings fringed with yellow hairs along the interior border. Length of the body  $5\frac{1}{2}$  lines; of the wings 13 lines.

**a.** Moreton Bay. From Mr. Diggles' collection.

The genus *Gambua* which follows *Rhuma* in the Synopsis, page 312, is here omitted, as it does not belong to the *Boarmide*.

## Genus 38. MANONIDA.

**Mas.** *Statura minima*. *Corpus gracile*. *Proboscis indistincta*. *Palpi graciles*, *brevissimi*, *caput non superantes*. *Antennæ subpectinatæ*. *Abdomen brevisculum*. *Pedes graciles*. *Alæ elongatæ*, *integræ*, *concolores*, *litturis non diversis*; *anticæ apice rotundatæ*.

**Male.** Size very small. Body slender. Proboscis indistinct. Palpi slender, very short, not extending beyond the head; third joint indistinct. Antennæ pectinated; branches rather short and far apart. Abdomen rather short. Legs slender; hind tibia not incrassated; spurs long. Wings elongate, entire, alike in colour



and with like markings. Fore wings rounded at the tips; exterior border moderately oblique. Hind wings extending beyond the abdomen.

This genus has some resemblance to the *Larentidæ*.

1. *MANONIDA ATRATULA*.

*Mas.* *Cinereo-nigra; alæ lineis quatuor atris, tribus undulatis, 1a angulosa submarginali.*

*Male.* Cinereous-black, dark cinereous beneath. Wings with four deep black lines; first, second and third lines undulating; fourth submarginal, zigzag. Length of the body  $2\frac{1}{2}$  lines; of the wings 7 lines.

*s. Ega.* From Mr. Bates' collection.

## A D D E N D A .

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### HEMEROPHILA UNITARIA.

*Var. Male.* Whitish fawn-colour, darker hindward. Antennæ very broadly pectinated. Abdomen with a black band on the hind border of each segment. Wings with black lines; exterior line extremely oblique; space beyond it deep fawn-colour; submarginal line whitish, zigzag, much interrupted in the hind wings, as is also the black marginal line; under side with a middle black band and an exterior black line, which does not correspond to that line above. Fore wings with the interior and exterior lines abruptly retracted and acutely angular towards the costa, where they are dilated. Hind wings with black streaks, with a black middle band, and with a whitish fawn-coloured marginal band. Length of the body 9 lines; of the wings 22 lines.

a. United States. Presented by E. Doubleday, Esq.

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### CLEORA TINCTARIA.

*Fœm. Albida, fusco dense conspersa, palpi brevissimi; abdominis segmenta albo marginata; alæ anticæ lineis quinque fuscis undulatis diffusis incompletis, 3a 4aque subcontiguæ, linea marginali e punctis elongatis nigris, litura discali nigra transversa.*

*Female.* Whitish. Body, legs and wings thickly speckled with brown. Palpi very short, extending a little beyond the head. Hind borders of the abdominal segments white. Fore wings with five brown undulating diffuse and incomplete lines, which are composed of confluent speckles, and are almost obsolete on the under side; third and fourth lines nearly contiguous; marginal line com-

posed of elongated black points; discal mark black, transverse. Hind wings with less distinct marks. Length of the body 4 lines; of the wings 12 lines.

Canada. In Mr. D'Urban's collection.

#### CLEORA LIMITARIA.

*Fœm.* Albida; palpi nigri, brevissimi, caput paullo superantes; alæ anticae lineis quinque dentatis undulatis nigris, fasciis tribus fuscescente-cinereis, 3a postice abbreviata, linea marginali e punctis nigris; posticae gutta discali, lineis duabus exterioribus indistinctis.

*Female.* Whitish. Palpi mostly black, very short, extending a little beyond the head. Fore wings with five dentate undulating black lines, and with three brownish cinereous bands; second and third lines less distinct than the fourth, which forms two conspicuous angles, and is most strongly marked hindward; second and third bands with cuneiform angles on the exterior side; third much abbreviated hindward; marginal line composed of pairs of black points; discal mark small, black, transverse. Hind wings with a discal dot and with two indistinct exterior lines. Length of the body 4 lines; of the wings 12 lines.

Canada. In Mr. D'Urban's collection.

#### CLEORA DIVISARIA.

*Mas.* Cinerea; palpi porrecti, caput sat superantes, extus nigricantes, articulo 3o minimo; alæ anticae litura costali basali lineisque tribus fuscis, lineis 2a 3aque duplicatis, punctis marginalibus fuscis; posticae lineis duabus exterioribus indistinctis.

*Male.* Cinereous. Palpi porrect, extending rather far beyond the head, blackish on the outer side; third joint conical, very minute. Fore wings with a brown mark by the base of the costa, and with five brown lines; first line slightly undulating; second and third approximate, parallel, undulating; fourth and fifth approximate and very undulating, parallel, except towards the costa, where they diverge; marginal points brown. Hind wings with two indistinct exterior lines. Length of the body  $4\frac{1}{2}$  lines; of the wings 12 lines.

Canada. In Mr. D'Urban's collection.

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## BOARMIA INORDINARIA.

**Fœm.** *Albido-cinerea, fusco pallido dense conspersa; alæ punctis marginalibus nigris; anticæ fasciis duabus undulatis fuscis ex parte obscurioribus et dilatatis, fascia adhuc exteriori informi; posticæ lineis nullis.*

**Female.** Whitish cinereous, thickly speckled with pale brown. Wings with black marginal points. Fore wings with two undulating brown bands, which are here and there, and especially on the costa, dark brown and widened; an irregular brown band beyond the exterior line. Hind wings without lines. Length of the body  $4\frac{1}{2}$  lines; of the wings 12 lines.

Canada. In Mr. D'Urban's collection.

## BOARMIA CINERARIA.

**Mas.** *Albido-cinerea, nigro-conspersa; palpi nigricantes, brevissimi; antennæ pubescentes, thorax nigro fasciatus; alæ lineis duabus obliquis denticulatis punctisque marginalibus nigris, linea submarginali albida denticulata.*

**Male.** Whitish cinereous, thickly and minutely black-speckled. Palpi blackish, very short. Antennæ pubescent. Thorax with a black band in front. Wings with black marginal points, with two denticulated oblique black lines, and with slight traces of two other lines; submarginal line whitish, denticulated; under side with one indistinct line. Length of the body 6 lines; of the wings 18 lines.

Canada. In Mr. D'Urban's collection.

## BOARMIA CONVERGARIA.

**Mas.** *Albida, fusco conspersa; caput et thorax fuscescentia; alæ subtus gutta discali nigra; anticæ e punctis subfasciata; posticæ albæ, lituris paucis fuscis.*

**Male.** Whitish, with numerous and irregular brown speckles, which are here and there confluent on the fore wings. Head and thorax brownish. Antennæ moderately pectinated, except at the tips. Wings beneath with a black discal dot. Fore wings irregularly banded. Hind wings white, with a few irregular brown marks. Length of the body 4 lines; of the wings 11 lines.

Canada. In Mr. D'Urban's collection.

## BOARMIA? EJECTARIA.

**Mas.** *Pallide fuscescens ; antennæ subpectinatae ; tibiæ nigricante fasciata, posticæ incrassatae ; alæ nigricante conspersæ, linea media nigricante subundulata postice duplicata, linea interiore indistincta, punctis discali et marginalibus nigris ; anticæ linea submarginali e guttis nigris postice obsoleta ; posticæ linea submarginali e punctis nigris.*

**Male.** Pale brownish, more cinereous beneath. Antennæ slightly pectinated. Tibiæ with blackish bands ; hind tibiæ incrassated. Wings slightly and irregularly blackish-speckled, with a blackish slightly undulating middle line, which is irregularly double towards the interior border ; a more indistinct interior line ; discal point and marginal points black ; under side without lines. Fore wings with a submarginal line, which is composed of black dots in front, and is obsolete hindward. Hind wings with a submarginal line of black points. Length of the body 6 lines ; of the wings 16 lines.

**Canada.** In Mr. D'Urban's collection.

## BOARMIA DIVISARIA.

**Fœm.** *Albido-cinerea, fusco subconspersa ; abdomen basi annulique nigricantibus ; alæ amplæ, fascia obliqua fusca, nigro strigata et intus marginata, guttis marginalibus nigris ; anticæ fascia basali.*

**Female.** Whitish cinereous, thinly brown-speckled. Abdomen blackish at the base and on the sutures of the segments. Wings ample, with a regular oblique brown band, which is bordered with black on the inner side, and is intersected by black streaks ; marginal dots black ; under side without lines. Fore wings with a basal band, which is much like the middle band. Length of the body 6 lines ; of the wings 20 lines.

**Canada.** In Mr. D'Urban's collection.

Page 383.

## BOARMIA CARITARIA.

**Mas.** *Pallide cinerea, vix viridescens ; antennæ late pectinatae ; alæ lineis nigricantibus valde denticulatis, linea submarginali ex parte duplicata, guttis marginalibus nigris ; annulo discali nigricante marginato subtus pleno, fascia subtus lata fuscescente.*

**Male.** Pale cinereous, with a very slight greenish tinge. Antennæ broadly pectinated to seven-eighths of the length. Wings with the lines blackish, much denticulated; submarginal line less denticulated than the other two, here and there slightly double; marginal dots black; a broadly blackish-bordered ringlet in each disk; under side with a large bluish spot in each disk, and with a broad brownish border. Length of the body 8 lines; of the wings 22 lines.

Ceylon. In Mr. Layard's collection.

#### BOARMIA DIFFLUARIA.

**Fœm.** *Albida, fusco subconspersa; alæ apud marginem exteriorem fuscescentes, lineis tribus fuscis undulatis denticulatis, lineis duabus denticulatis submarginalibus; anticæ lineis exterioribus et submarginali costam versus reflexis.*

**Female.** Whitish, minutely speckled with brown. Wings more speckled exteriorly, brownish about the exterior border; the three usual lines brown, undulating, denticulated; two regularly denticulated lines near the exterior border. Fore wings with the exterior and submarginal lines reflexed towards the costa; discal mark indicated by a black point, apparent also beneath and corresponding to a like point on the under side of the hind wings. Length of the body  $5\frac{1}{2}$  lines; of the wings 16 lines.

Ceylon. In Mr. Layard's collection.

#### BOARMIA? EXCLUSARIA.

**Fœm.** *Fuscescente-cervina; alæ fusco conspersæ, linea 1a e punctis nigricanticus, 2a fusca diffusa obliqua subrecta, 3a nigricante denticulata, 4a angulata denticulata sordide albida fusco submarginata; anticæ vix dentatæ; posticæ dentatæ, intus albide fusco conspersæ.*

**Female.** Brownish fawn-colour. Head and fore border of the thorax brown. Wings speckled with brown; interior line composed of blackish points; middle line brown, diffuse, oblique, nearly straight; exterior line blackish, denticulated; submarginal line dingy whitish, irregular, denticulated, partly and diffusely bordered with brown. Fore wings hardly denticulated. Hind wings distinctly denticulated, whitish and speckled with brown interiorly, brown exteriorly. Length of the body 7 lines; of the wings 20 lines.

Ceylon. In Mr. Layard's collection.

## BOARMIA? DISTERMINATA.

**Mas.** *Albida, fusco subconspersa; palpi breves; antennæ breviusculæ, ramis robustis; alæ punctis marginalibus nigris; anticæ fascia media latissima fusca lunulam nigram includente; posticæ lineis interiore et exteriori fuscis, hac duplicata.*

**Male.** Whitish, slightly brown-speckled. Palpi short: Antennæ rather short, pectinated, except towards the tips; branches stout, ciliated. Abdomen not extending beyond the hind wings. Hind tibiæ slightly incrassated. Wings with black marginal points. Fore wings with a very broad brown middle band, which contains a black slender discal lunule. Hind wings with slight brown interior and exterior lines, the latter double. Length of the body 5 lines; of the wings 14 lines.

**a.** Ceylon. Presented by Dr. Templeton.

## BOARMIA? ALBOSIGNARIA.

*Alæ albidae, fusco irroratæ, strigatæ et nebulosæ, macula mediana fusca, albo signata.*

*Boarmia albosignaria, Bremer und Grey, Beitr. zur Schmett.-Fauna des Nordlichen China's, 21, 106.*

North China.

## BOARMIA? IRROBATARIA.

*Alæ anticæ albidae, fusco irroratæ et striatæ, macula mediana obscura, margine externo fusco nebuloso et striga alba dentata; posticæ fusco irroratæ, fascia mediana fusca nebulosa, media albo punctata, striga dentata submarginali.*

*Boarmia irrobataria, Bremer und Grey, Beitr. zur Schmett.-Fauna des Nordlichen China's, 20, 105.*

North China.

## BOARMIA PUPILLATA.

**Mas.** *Cinerea, nigro conspersa; abdomen e guttis nigris bilineatum; alæ sublutescente tinctæ, lineis interiore et exteriori nigris duplicatis denticulatis undulatis, linea submarginali latiore diffusa albo marginata, guttis marginalibus bene determinatis, macula discali albo notata, fascia marginali subtus latissima maculas albas includente.*

**Male.** Cinereous, thickly black-speckled. Abdomen with two rows of transverse black dots. Wings slightly and partly tinged with dull luteous: interior and exterior lines black, double, denticulated, undulating; submarginal line more diffuse, white-bordered on the outer side; marginal dots black, large; discal spot black with a white mark in the disk, wholly blackish and very large beneath, where there is a very broad marginal blackish band, which contains some white spots. Fore wings with the mark in the discal spot forming a zigzag line. Length of the body 5 lines; of the wings 16 lines.

Sarawak, Borneo. In Mr. Saunders' collection.

#### BOARMIA ? AUSTRALASIARIA.

*Alæ dentatæ, fusco-ferrugineæ; antica costa basali albida strigataque duabus undatis, nigris; postica strigis plurimis lunulæque centrali obscuris.*

Boarmia Australasiaria, *Boisd. Voy. de l'Australabe*, Pt. 1, Lep. 257, 2. Australia.

#### Genus SABARIA.

**Mas.** Corpus sat robustum. Proboscis brevis. Palpi brevissimi, articulo 3o brevi. Antennæ pectinatæ, apices versus filiformes, corpore perparum breviores. Pedes validi; calcaria longa. Alæ anticæ costa subconvexa, margine exteriori bisinuato; postica margine exteriori submarginato.

**Male.** Body moderately stout. Proboscis short. Palpi very short, not extending as far as the front of the head; third joint conical, not more than one-fourth the length of the second. Antennæ moderately pectinated to three-fourths the length, very little shorter than the body. Abdomen not extending beyond the hind wings. Legs stout, bare; spurs long. Wings moderately broad. Fore wings slightly convex along the costa, rectangular at the tips; exterior border convex in the middle, and slightly excavated on each side. Hind wings with the exterior border slightly emarginate; interior angle rather prominent.

#### SABARIA CONTRACTARIA.

**Mas.** *Luteo-cinerea; alæ anticæ fuscescente strigatæ, maculis duabus costalibus subtrigonis fuscescentibus; postica magis conspersa.*



**Male.** Cinereous, with a luteous tinge which is most apparent on the under side. Fore wings irregularly covered with transverse brownish points and minute streaks; costa with two nearly angular pale brownish spots. Hind wings more thickly covered with paler and more minute points. Length of the body 4 lines; of the wings 10 lines.

**Ceylon.** In Mr. Layard's collection.

## Addenda to the Urapterydæ.

*Page 221.*

### CHÆRODES SUBCLARARIA.

This species and *Clysia subopalaria*, p. 46, are identical.

## Addenda to the Ennomidæ.

*Page 219.*

### Genus ORSONOBA.

#### ORSONOBA COMPLICATARIA.

**Mas.** *Cervina*; antennæ pectinatae, apices versus filiformes; abdomen basi nigro fasciatum, subtus dense lanuginosum; tibiæ posticæ valde incrassatæ, femoribus duplo longiores; alæ dentatæ, fusco subconspersæ, linea submarginali alba; anticæ costam versus pallidiores, linea tenui discali fusca, litura discali magna rufescente angulata obliqua nigro conspersa et marginata; posticæ valde dentatæ, linea tenui discali fusca apud venas nigricante, litura parva discali.

*Male.* Fawn-colour. Head marked with brown. Antennæ pectinated to three-fourths of the length. Thorax with a slight brown band in front. Abdomen with a black band at the base, densely lanuginous beneath. Hind tibiæ very much incrassated, twice the length of the femora. Wings dentate, very thinly brown-speckled, with a submarginal white line, which is straight in the hind wings, slightly undulating in the fore wings, where it is dilated hindward into two exterior angles. Fore wings paler in front, except towards the base, with some black speckles about the middle of the submarginal line, with an ochraceous patch near the base of the interior border, and with a slight brown line, which is approximate and parallel to the hind border of the pale part; costa blackish-speckled; discal mark large, reddish, angular, oblique, black-speckled and bordered. Hind wings much more dentate than the fore wings, with a slight brown discal line, which is blackish on the veins, and with a discal mark, which is like that of the fore wings, but much smaller. Wings beneath pale, with the discal mark and a broad angular submarginal band cinereous-reddish. Length of the body 10 lines; of the wings 26 lines.

Sarawak, Borneo. In Mr. Saunders' collection.

### Genus EREBOMORPHA.

*Mas et fœm.* Corpus robustum. Proboscis longa, valida. Palpi lati, squamosi, ascendentes, articulo 3o brevissimo. Antennæ maris dense pectinatæ, apice setulosæ. Pedes robusti; femora postica maris apices versus fasciculata; tibiæ posticæ incrassatæ, longissimæ, calcaribus apicalibus breviusculis. Alæ elongatæ, amplæ; anticæ vix acutæ; posticæ plus minusve truncatæ et dentatæ.

*Male and female.* Body stout. Proboscis long, robust. Palpi broad, squamous, ascending; third joint extremely short. Antennæ of the male densely pectinated nearly to the tips; the apical part setulose. Legs stout; hind femora of the male tufted beneath towards the tips; hind tibiæ very long, most incrassated in the male; apical spurs rather short. Wings elongate, ample. Fore wings hardly acute, very oblique and hardly convex along the exterior border. Hind wings truncated at the tips and along the hind part of the exterior border, which is more or less dentate in front.

## 1. EREBOMORPHA FULGURITA.

**Mas et. fœm.** *Ochracea, antice fuscescens; abdomen basi albo fasciatum; alæ nigro confertissime strigatæ; antica vitta lata fasciæque tenui obliqua albis; postica vitta lata arcuata interrupta vittæque postica tenui abbreviata basi que albis.*

**Male and female.** Ochraceous. Head and fore part of the thorax and anterior legs mostly brown. Abdomen with a white band at the base. Wings transversely and very thickly streaked with black; the streaks here and there confluent; a broad white stripe occupying the base of the hind wings, parallel to the costa of the fore wings, irregular and attenuated towards the tips; under side with the white marks more prevalent. Fore wings with a slender white band extending obliquely from the end of the interior border to the stripe. Hind wings with a curved broad white stripe, which is interrupted towards the tips, and with a hinder slender abbreviated white stripe, which is nearly in a line with the band of the fore wings. Length of the body 8—10 lines; of the wings 28—32 lines.

**Hindustan.** In Mr. Saunders' collection.

## 2. EREBOMORPHA FULGURARIA.

**Mas.** *Ochracea; abdomen supra fuscum, basi albo fasciatum; tibiæ posticæ sat incrassatæ; alæ confertissime nigro strigatæ; antica acutæ, subfalcata, vitta alba discali angulata fascias tres tenues emittente; postica albo trivittatæ, vitta 1a costali.*

**Male.** Ochraceous. Head brown in front. Abdomen brown above, with a white band at the base. Legs blackish brown; hind tibiæ moderately incrassated. Wings transversely and very thickly streaked with black; under side with the white markings somewhat diffuse. Fore wings acute, subfalcate, with a white discal stripe, which forms an obtuse angle, and thence emits a band to the interior border and two more slender bands to the costa. Hind wings with a white costal stripe, which is terminated by a second white stripe; the latter from the disk to the interior border is approximate and nearly parallel to a third white stripe, which extends from the tips. Length of the body 10 lines; of the wings 28 lines.

**α. ———?** Presented by E. Doubleday, Esq.

Page 279.

Fam. CENOCHROMIDÆ.

For MONOCTENIA SALEARNARIA read MONOCTENIA FALERNARIA.

Fam. 6. BOLETOBIDÆ.

Corpus gracile. Frons rugosa, non fasciculata. Palpi longissimi, recti, porrecti. Antennæ variæ. Pedes longi; tibiæ posticæ non incrassatæ, calcaribus quatuor longis approximatis. Alæ integre, spissæ; anticæ apice obtusæ; posticæ non incisæ.

Boletobidæ, *Guen. Phal. i. 328.*

Body slender. Front rugose, not tufted. Palpi very long, straight, porrect. Antennæ various. Legs long; hind tibiæ not incrassated, with four long approximate spurs. Wings entire, stout, alike in both sexes. Fore wings obtuse at the tips. Hind wings not notched.

Genus 1. STELLIDIA.

*Fœm.* Palpi longi, recti, contigui, filiformes; articulus 3us 2o vix brevior. Antennæ serratæ, ciliatæ. Alæ integre; anticæ albo punctatæ, lineis nullis, fimbria punctata; posticæ fere unicolores. *Stellidia, Guen. Phal. i. 328.*

*Female.* Palpi long, straight, filiform, contiguous; third joint very little shorter than the second. Antennæ serrated; each of the laminæ furnished with a robust curved cilium. Wings entire. Fore wings and their fringe speckled with white; lines obsolete. Hind wings almost of one colour.

1. STELLIDIA PLANETARIA.

*Fœm.* *Fuliginoso-nigra; alæ punctis marginalibus plurimis albis; anticæ lineis e punctis nonnullis albis; posticæ subtus punctis submarginalibus albis lineaque media indistincta.*

*Stellidia planetaria, Guen. Phal. i. 329, 512, pl. 20, f. 4.*

Brazil.

## Genus 2. XYLIODES.

*Mas.* Proboscis nulla aut subobsoleta. Palpi squamosi, caput longe superantes; articulus 2us latus, coxiformis; 3us bene determinatus, 2i dimidio non longior. Antennæ simplices, squamosæ. Tibiæ posticæ squamosæ, calcaribus longissimis; tarsi postici appressi. Alæ integræ, discolores; anticæ oblongæ, lineis distinctis; posticæ rotundatæ, lituris nullis.

*Xyliodes*, *Guen. Phal.* i. 329.

*Male.* Proboscis none or rudimentary. Palpi squamous, extending far beyond the head; second joint broad, coxiform; third very distinct, about half the length of the second. Antennæ simple, with silky scales above. Hind tibiæ squamous, with very long spurs; hind tibiæ flattened. Wings entire. Fore wings oblong; lines distinct; interior border almost as long as the costa. Hind wings rounded, differing from the fore wings, without lines.

## 1. XYLIODES FORTUNARIA.

*Mas.* *Pallide ochracea; palpi nigro-fusci; alæ anticæ apices versus subfuscescentes, costa interiore, spatio medio postico umbræque subapicali interrupta nigro-fuscis, macula discali ovata pallido notata, linea exterior valde sinuata, guttis marginalibus trigonis nigris; posticæ fuliginoso-cinereæ.*

*Xyliodes Fortunaria*, *Guen. Phal.* i. 329, 513.

North China.

## Genus 3. BOLETOBIA.

Corpus gracile. Proboscis brevis. Palpi lati, acuti, villosi-hirsuti, caput longe superantes; articuli indistincti. Antennæ maris late pectinatæ. Abdomen alas posticas non superans. Tibiæ posticæ non incrassatæ. Alæ concolores, lituris non diversis.

*Parascotia*, p., *Hübner. Verz. Schm.* 314.

*Gnophos*, p., *Trait.*

*Boletobia*, *Boisd. Ind.* 201; *Herr.-Sch.*; *Guen. Phal.* i. 330.

*Fidonia*, p., *Steph.*

Body slender. Proboscis short. Palpi broad, acute, villose-hirsute, extending far beyond the head; joints indistinct. Antennæ of the male broadly pectinated; branches long, slender, regular,

ciliated, contiguous at the tips. Abdomen not extending beyond the hind wings. Hind tibiæ not incrassated, with four long spurs. Wings alike in colour and with like markings.

# 1. BOLETOBIA FULIGINARIA.

*Nigricans; alæ lineis exterioribus et submarginalibus denticulatis et  
 misque marginalibus luteis, lunulis marginalibus nigris  
 fimbria lutescente notata; antica linea interiore liturata  
 costalibus luteis.*

*Phalæna-Geometra fuliginaria*, Linn. *Faun. Suec.* 1247. *Clerus*  
*Icon.* pl. 8, f. 7.

*Phalæna fuliginaria*, Fabr. *Ent. Syst.* iii. 2, 162, 120.

*Geometra fuliginaria*, Bork. *Eur. Schm.* v. 124. *Haw. Lep. Brit.*  
 281.

*Geometra carbonaria*, Wien. *Verz.* 108, 5. *Illig. N. Ausg. den.*  
 431, 5. *Esp. Schm.* v. 182, pl. 32, f. 3. *Bork. Eur. Schm.*  
 v. 125. *Hübner. Geom.* pl. 28, f. 151.

*Phalæna carbonaria*, Fabr. *Ent. Syst.* iii. 2, 154, 88.

*Phalæna lunulata*, Fabr. *Ent. Syst.* iii. 2, 194, 235.

*Phalæna lignaria*, Fabr. *Ent. Syst.* iii. 2, 160, 111.

*Purascotia carbonaria*, Hübn. *Verz. Schm.* 314, 3035.

*Gnophos carbonaria*, Treit. *Schm.* vi. 184, 14. *Dup. Lep.* v. 22  
 pl. 186, f. 4.

*Fidonia fuliginaria*, Steph. *Ill. Brit. Haust.* iii. 149, 3.

*Boletobia carbonaria*, Boisd. *Ind.* 201, 1596. *Herr.-Sch. Ent.*  
*Schm.* iii. 36, 101.

*Boletobia fuliginaria*, Guen. *Phal.* i. 330, 514.

a. England. From Mr. Stephens' collection.

b. England.







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LIST

OF THE

SPECIMENS

OF

LEPIDOPTEROUS INSECTS

IN

THE COLLECTION

OF THE

BRITISH MUSEUM. (Nat. hist  
Dept. of zoology.  
BY

FRANCIS WALKER, F.L.S., &c.

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PART XXII.—GEOMETRITES.

(CONTINUED).

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PRINTED BY ORDER OF THE TRUSTEES.  
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## P R E F A C E .

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THE object of the present Catalogue is to give a complete list of all the genera and species of Geometrites known to exist in the different collections. The letters *a, b, c, &c.*, after the species, denote the specimens now contained in the British Museum, followed by the *habitat* and the mode in which each of them was obtained, and the absence of these *letters* indicates the species which are desiderata, and therefore desirable to be procured for the collection.

JOHN EDWARD GRAY.

*British Museum,*

*April 16, 1861.*



# CATALOGUE

OF

## LEPIDOPTERA HETEROCERA.

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### FIFTH SERIES.

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#### Fam. 7. GEOMETRIDÆ.

**Corpus mediocriter.** Proboscis tenuis, pallida, longitudine varia. Palpi recti, graciles, sæpissime breves. Antennæ maris sæpissime pectinatæ apice filiformes, fœminæ simplices aut crenulatæ. Thorax lævis, suboblongus. Abdomen nonnunquam cristatum. Pedes glabri, rarissime longi, nunquam villosi; tibiæ nonnunquam bicalcaratæ. Alæ læves, virides, rotundatæ aut angulatæ, vix unquam incisæ.

*Chlorochromidæ, Dup.*

*Geometridæ, Guen. Phal. i. 333.*

**Body moderately stout.** Proboscis slender, pale, variable as to length, never very long. Palpi straight, slender, sometimes varying according to the sexes, often not extending beyond the front. Antennæ of the male very generally pectinated, with filiform tips, of the female simple or crenulated. Thorax smooth, somewhat oblong; tegulæ not elevated. Abdomen occasionally crested. Legs smooth, very rarely long, never villose; hind tibiæ in some species with a single pair of spurs. Wings smooth, rounded or angular, almost always entire, of a green ground-colour, alike in both sexes.

Page 351.

**BOARMIA INORDINARIA.**

**Fœm.** *Albido-cinerea, fusco pallido dense conspersa; alæ punctis marginalibus nigris; anticæ fasciis duabus undulatis fuscis ex parte obscurioribus et dilatatis, fascia adhuc exteriori informi; posticæ lineis nullis.*

**Female.** Whitish cinereous, thickly speckled with pale brown. Wings with black marginal points. Fore wings with two undulating brown bands, which are here and there, and especially on the costa, dark brown and widened; an irregular brown band beyond the exterior line. Hind wings without lines. Length of the body  $4\frac{1}{2}$  lines; of the wings 12 lines.

**Canada.** In Mr. D'Urban's collection.

**BOARMIA CINERARIA.**

**Mas.** *Albido-cinerea, nigro-conspersa; palpi nigricantes, brevissimi; antennæ pubescentes, thorax nigro fasciatus; alæ lineis duabus obliquis denticulatis punctisque marginalibus nigris, linea submarginali albida denticulata.*

**Male.** Whitish cinereous, thickly and minutely black-speckled. Palpi blackish, very short. Antennæ pubescent. Thorax with a black band in front. Wings with black marginal points, with two denticulated oblique black lines, and with slight traces of two other lines; submarginal line whitish, denticulated; under side with one indistinct line. Length of the body 6 lines; of the wings 18 lines.

**Canada.** In Mr. D'Urban's collection.

**BOARMIA CONVERGARIA.**

**Mas.** *Albida, fusco conspersa; caput et thorax fuscescentia; alæ subtus gutta discali nigra; anticæ e punctis subfasciatae; posticæ albæ, lituris paucis fuscis.*

**Male.** Whitish, with numerous and irregular brown speckles, which are here and there confluent on the fore wings. Head and thorax brownish. Antennæ moderately pectinated, except at the tips. Wings beneath with a black discal dot. Fore wings irregularly banded. Hind wings white, with a few irregular brown marks. Length of the body 4 lines; of the wings 11 lines.

**Canada.** In Mr. D'Urban's collection.

## BOARMIA? EJECTARIA.

**Mas.** *Pallide fuscescens; antennæ subpectinatae; tibiæ nigricante fasciata, posticæ incrassatae; alæ nigricante conspersæ, linea media nigricante subundulata postice duplicata, linea inferiore indistincta, punctis discali et marginalibus nigris; antica linea submarginali e guttis nigris postice obsoleta; posticæ linea submarginali e punctis nigris.*

**Male.** Pale brownish, more cinereous beneath. Antennæ slightly pectinated. Tibiæ with blackish bands; hind tibiæ incrassated. Wings slightly and irregularly blackish-speckled, with a blackish slightly undulating middle line, which is irregularly double towards the interior border; a more indistinct interior line; discal point and marginal points black; under side without lines. Fore wings with a submarginal line, which is composed of black dots in front, and is obsolete hindward. Hind wings with a submarginal line of black points. Length of the body 6 lines; of the wings 16 lines.

**Canada.** In Mr. D'Urban's collection.

## BOARMIA DIVISARIA.

**Fœm.** *Albido-cinerea, fusco subconsersa; abdomen basi annulique nigricantibus; alæ amplæ, fascia obliqua fusca, nigro strigata et intus marginata, guttis marginalibus nigris; antica fascia basali.*

**Female.** Whitish cinereous, thinly brown-speckled. Abdomen blackish at the base and on the sutures of the segments. Wings ample, with a regular oblique brown band, which is bordered with black on the inner side, and is intersected by black streaks; marginal dots black; under side without lines. Fore wings with a basal band, which is much like the middle band. Length of the body 6 lines; of the wings 20 lines.

**Canada.** In Mr. D'Urban's collection.

Page 383.

## BOARMIA CARITARIA.

**Mas.** *Pallide cinerea, vix viridescens; antennæ late pectinatae; alæ lineis nigricantibus valde denticulatis, linea submarginali ex parte duplicata, guttis marginalibus nigris; annulo discali nigricante marginato subtus pleno, fascia subtus lata fuscescens.*

*Male.* Pale cinereous, with a very slight greenish tinge. Antennæ broadly pectinated to seven-eighths of the length. Wings with the lines blackish, much denticulated; submarginal line less denticulated than the other two, here and there slightly double; marginal dots black; a broadly blackish-bordered ringlet in each disk; under side with a large bluish spot in each disk, and with a broad brownish border. Length of the body 8 lines; of the wings 22 lines.

Ceylon. In Mr. Layard's collection.

#### BOARMIA DIFFLUARIA.

*Fœm.* *Albida, fusco subconspersa; alæ apud marginem exteriorem fuscescentes, lineis tribus fuscis undulatis denticulatis, lineis duabus denticulatis submarginalibus; anticæ lineis exterioribus et submarginali costam versus reflexis.*

*Female.* Whitish, minutely speckled with brown. Wings more speckled exteriorly, brownish about the exterior border; the three usual lines brown, undulating, denticulated; two regularly denticulated lines near the exterior border. Fore wings with the exterior and submarginal lines reflexed towards the costa; discal mark indicated by a black point, apparent also beneath and corresponding to a like point on the under side of the hind wings. Length of the body  $5\frac{1}{2}$  lines; of the wings 16 lines.

Ceylon. In Mr. Layard's collection.

#### BOARMIA? EXOLUSARIA.

*Fœm.* *Fuscescente-cervina; alæ fusco conspersæ, linea 1a e punctis nigricanticus, 2a fusca diffusa obliqua subrecta, 3a nigricante denticulata, 4a angulata denticulata sordide albida fusco submarginata; anticæ vix dentatæ; posticæ dentatæ, intus albidæ fusco conspersæ.*

*Female.* Brownish fawn-colour. Head and fore border of the thorax brown. Wings speckled with brown; interior line composed of blackish points; middle line brown, diffuse, oblique, nearly straight; exterior line blackish, denticulated; submarginal line dingy whitish, irregular, denticulated, partly and diffusedly bordered with brown. Fore wings hardly denticulated. Hind wings distinctly denticulated, whitish and speckled with brown interiorly, brown exteriorly. Length of the body 7 lines; of the wings 20 lines.

Ceylon. In Mr. Layard's collection.



## BOARMIA? DISTERMINATA.

**Mas.** *Albida, fusco subconspersa; palpi breves; antennæ breviusculæ, ramis robustis; alæ punctis marginalibus nigris; anticæ fascia media latissima fusca lunulam nigram includente; posticæ lineis interiore et exteriori fuscis, hac duplicata.*

**Male.** Whitish, slightly brown-speckled. Palpi short: Antennæ rather short, pectinated, except towards the tips; branches stout, ciliated. Abdomen not extending beyond the hind wings. Hind tibiæ slightly incrassated. Wings with black marginal points. Fore wings with a very broad brown middle band, which contains a black slender discal lunule. Hind wings with slight brown interior and exterior lines, the latter double. Length of the body 5 lines; of the wings 14 lines.

**a.** Ceylon. Presented by Dr. Templeton.

## BOARMIA? ALBOSIGNARIA.

*Alæ albidae, fusco irroratæ, strigatæ et nebulosæ, macula mediana fusca, albo signata.*

**Boarmia albosignaria**, Bremer und Grey, *Beitr. zur Schmett.-Fauna des Nordlichen China's*, 21, 106.

North China.

## BOARMIA? IRRORATARIA.

*Alæ anticæ albidae, fusco irroratæ et striatæ, macula mediana obscura, margine externo fusco nebuloso et striga alba dentata; posticæ fusco irroratæ, fascia mediana fusca nebulosa, media albo punctata, striga dentata submarginali.*

**Boarmia irrorataria**, Bremer und Grey, *Beitr. zur Schmett.-Fauna des Nordlichen China's*, 20, 105.

North China.

## BOARMIA PUPILLATA.

**Mas.** *Cinerea, nigro conspersa; abdomen e guttis nigris bilineatum; alæ sublutescente tinctæ, lineis interiore et exteriori nigris duplicatis denticulatis undulatis, linea submarginali latiore diffusa albo marginata, guttis marginalibus bene determinatis, macula discali albo notata, fascia marginali subtus latissima maculas albas includente.*

**Male.** Cinereous, thickly black-speckled. Abdomen with two rows of transverse black dots. Wings slightly and partly tinged with dull luteous: interior and exterior lines black, double, denticulated, undulating; submarginal line more diffuse, white-bordered on the outer side; marginal dots black, large; discal spot black, with a white mark in the disk, wholly blackish and very large beneath, where there is a very broad marginal blackish band, which contains some white spots. Fore wings with the mark in the discal spot forming a zigzag line. Length of the body 5 lines; of the wings 16 lines.

Sarawak, Borneo. In Mr. Saunders' collection.

#### BOARMIA ? AUSTRALASIARIA.

*Ala dentatæ, fusco-ferrugineæ; anticæ costa basali albida strigisque duabus undatis, nigris; posticæ strigis plurimis lunulaque centrali obscuris.*

Boarmia Australasiaria, *Boisd. Voy. de l'Australabe*, Pt. 1, Lep. 257, 2, Australia.

#### Genus SABARIA.

**Mas.** Corpus sat robustum. Proboscis brevis. Palpi brevissimi, articulo 3o brevi. Antennæ pectinatæ, apices versus filiformes, corpore perparum breviores. Pedes validi; calcaria longa. Alæ anticæ costa subconvexa, margine exteriori bisinuato; posticæ margine exteriori submarginato.

**Male.** Body moderately stout. Proboscis short. Palpi very short, not extending as far as the front of the head; third joint conical, not more than one-fourth the length of the second. Antennæ moderately pectinated to three-fourths the length, very little shorter than the body. Abdomen not extending beyond the hind wings. Legs stout, bare; spurs long. Wings moderately broad. Fore wings slightly convex along the costa, rectangular at the tips; exterior border convex in the middle, and slightly excavated on each side. Hind wings with the exterior border slightly emarginate; interior angle rather prominent.

#### SABARIA CONTRACTARIA.

**Mas.** *Luteo-cinerea; ala antica fuscescente strigata, maculis duabus costalibus subtrigonis fuscescentibus; postica magis conspersa.*

**Male.** Cinereous, with a luteous tinge which is most apparent on the under side. Fore wings irregularly covered with transverse pale brownish points and minute streaks; costa with two nearly triangular pale brownish spots. Hind wings more thickly covered with paler and more minute points. Length of the body 4 lines; of the wings 10 lines.

Ceylon. In Mr. Layard's collection.

## Addenda to the Urapterydæ.

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### CHÆRODES SUBCLARARIA.

This species and *Clysia subopalaria*, p. 46, are identical.

## Addenda to the Ennomidæ.

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### Genus ORSONOBA.

#### ORSONOBA COMPLICATARIA.

**Mas.** *Cervina*; antennæ pectinatæ, apices versus filiformes; abdomen basi nigro fasciatum, subtus dense lanuginosum; tibiæ posticæ valde incrassatæ, femoribus duplo longiores; alæ dentatæ, fusco subconspersæ, linea submarginali alba; antica costam versus pallidiores, linea tenui discali fusca, litura discali magna rufescente angulata obliqua nigro conspersa et marginata; posticæ valde dentatæ, linea tenui discali fusca apud venas nigricante, litura parva discali.

**Male.** Fawn-colour. Head marked with brown. Antennæ pectinated to three-fourths of the length. Thorax with a slight brown band in front. Abdomen with a black band at the base, densely lanuginous beneath. Hind tibiæ very much incrassated, twice the length of the femora. Wings dentate, very thinly brown-speckled, with a submarginal white line, which is straight in the hind wings, slightly undulating in the fore wings, where it is dilated hindward into two exterior angles. Fore wings paler in front, except towards the base, with some black speckles about the middle of the submarginal line, with an ochraceous patch near the base of the interior border, and with a slight brown line, which is approximate and parallel to the hind border of the pale part; costa blackish-speckled; discal mark large, reddish, angular, oblique, black-speckled and bordered. Hind wings much more dentate than the fore wings, with a slight brown discal line, which is blackish on the veins, and with a discal mark, which is like that of the fore wings, but much smaller. Wings beneath pale, with the discal mark and a broad angular submarginal band cinereous-reddish. Length of the body 10 lines; of the wings 26 lines. Sarawak, Borneo. In Mr. Saunders' collection.

### Genus EREBOMORPHA.

**Mas et fœm.** Corpus robustum. Proboscis longa, valida. Palpi lati, squamosi, ascendentes, articulo 3o brevissimo. Antennæ maris dense pectinatæ, apice setulosæ. Pedes robusti; femora postica maris apices versus fasciculata; tibiæ posticæ incrassatæ, longissimæ, calcaribus apicalibus breviusculis. Alæ elongatæ, amplæ anticæ vix acutæ; posticæ plus minusve truncatæ et dentatæ.

**Male and female.** Body stout. Proboscis long, robust. Palpi broad, squamous, ascending; third joint extremely short. Antennæ of the male densely pectinated nearly to the tips; the apical part setulose. Legs stout; hind femora of the male tufted beneath towards the tips; hind tibiæ very long, most incrassated in the male; apical spurs rather short. Wings elongate, ample. Fore wings hardly acute, very oblique and hardly convex along the exterior border. Hind wings truncated at the tips and along the hind part of the exterior border, which is more or less dentate in front.

## 1. EREBOMORPHA FULGURITA.

**Mas et fœm.** *Ochracea, antice fuscescens; abdomen basi albo fasciatum; alæ nigro confertissime strigatæ; antica vitta lata fasciæque tenui obliqua albis; posticæ vitta lata arcuata interrupta vittaque postica tenui abbreviata basique albis.*

**Male and female.** Ochraceous. Head and fore part of the thorax and anterior legs mostly brown. Abdomen with a white band at the base. Wings transversely and very thickly streaked with black; the streaks here and there confluent; a broad white stripe occupying the base of the hind wings, parallel to the costa of the fore wings, irregular and attenuated towards the tips; under side with the white marks more prevalent. Fore wings with a slender white band extending obliquely from the end of the interior border to the stripe. Hind wings with a curved broad white stripe, which is interrupted towards the tips, and with a hinder slender abbreviated white stripe, which is nearly in a line with the band of the fore wings. Length of the body 8—10 lines; of the wings 28—32 lines.

**Hindustan.** In Mr. Saunders' collection.

## 2. EREBOMORPHA FULGURARIA.

**Mas.** *Ochracea; abdomen supra fuscum, basi albo fasciatum; tibiæ posticæ sat incrassatæ; alæ confertissime nigro strigatæ; antica acutæ, subfalcatæ, vitta alba discali angulata fascias tres tenues emittente; posticæ albo trivittatæ, vitta 1a costali.*

**Male.** Ochraceous. Head brown in front. Abdomen brown above, with a white band at the base. Legs blackish brown; hind tibiæ moderately incrassated. Wings transversely and very thickly streaked with black; under side with the white markings somewhat diffuse. Fore wings acute, subfalcate, with a white discal stripe, which forms an obtuse angle, and thence emits a band to the interior border and two more slender bands to the costa. Hind wings with a white costal stripe, which is terminated by a second white stripe; the latter from the disk to the interior border is approximate and nearly parallel to a third white stripe, which extends from the tips. Length of the body 10 lines; of the wings 28 lines.

**a. ———?** Presented by E. Doubleday, Esq.

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Fam. ŒNOCHROMIDÆ.

For MONOCTENIA SALEARNARIA read MONOCTENIA FALERNARIA.

Fam. 6. BOLETOBIDÆ.

Corpus gracile. Frons rugosa, non fasciculata. Palpi longissimi, recti, porrecti. Antennæ variæ. Pedes longi; tibiæ posticæ non incrassatæ, calcaribus quatuor longis approximatis. Alæ integræ, spissæ; anticæ apice obtusæ; posticæ non incisæ.

Boletobidæ, *Guen. Phal.* i. 328.

Body slender. Front rugose, not tufted. Palpi very long, straight, porrect. Antennæ various. Legs long; hind tibiæ not incrassated, with four long approximate spurs. Wings entire, stout, alike in both sexes. Fore wings obtuse at the tips. Hind wings not notched.

Genus 1. STELLIDIA.

*Fœm.* Palpi longi, recti, contigui, filiformes; articulus 3us 2o vix brevior. Antennæ serratæ, ciliatæ. Alæ integræ; anticæ albo punctatæ, lineis nullis, fimbria punctata; posticæ fere unicolores. *Stellidia*, *Guen. Phal.* i. 328.

*Female.* Palpi long, straight, filiform, contiguous; third joint very little shorter than the second. Antennæ serrated; each of the laminæ furnished with a robust curved cilium. Wings entire. Fore wings and their fringe speckled with white; lines obsolete. Hind wings almost of one colour.

1. STELLIDIA PLANETARIA.

*Fœm.* *Fuliginoso-nigra*; alæ punctis marginalibus plurimis albis; anticæ lineis et punctis nonnullis albis; posticæ subtus punctis submarginalibus albis lineaque media indistincta.

*Stellidia planetaria*, *Guen. Phal.* i. 329, 512, pl. 20, f. 4.

Brazil.

## Genus 2. XYLIODES.

*Mas.* Proboscis nulla aut subobsoleta. Palpi squamosi, caput longe superantes; articulus 2us latus, coxiformis; 3us bene determinatus, 2i dimidio non longior. Antennæ simplices, squamosæ. Tibiæ posticæ squamosæ, calcaribus longissimis; tarsi postici appressi. Alæ integræ, discolores; anticæ oblongæ, lineis distinctis; posticæ rotundatæ, lituris nullis.

*Xyliodes*, *Guen. Phal.* i. 329.

*Male.* Proboscis none or rudimentary. Palpi squamous, extending far beyond the head; second joint broad, coxiform; third very distinct, about half the length of the second. Antennæ simple, with silky scales above. Hind tibiæ squamous, with very long spurs; hind tibiæ flattened. Wings entire. Fore wings oblong; lines distinct; interior border almost as long as the costa. Hind wings rounded, differing from the fore wings, without lines.

## 1. XYLIODES FORTUNARIA.

*Mas.* *Pallide ochracea; palpi nigro-fusci; alæ anticæ apices versus subfuscescentes, costa interiore, spatio medio postico umbræ subapicali interrupta nigro-fuscis, macula discali ovata pallido notata, linea exterior valde rinuata, guttis marginalibus trigonis nigris; posticæ fuliginoso-cinereæ.*

*Xyliodes Fortunaria*, *Guen. Phal.* i. 329, 513.

North China.

## Genus 3. BOLETOBIA.

Corpus gracile. Proboscis brevis. Palpi lati, acuti, villosi-hirsuti, caput longe superantes; articuli indistincti. Antennæ maris late pectinatæ. Abdomen alas posticas non superans. Tibiæ posticæ non incrassatæ. Alæ concolores, lituris non diversis.

*Parascotia*, p., *Hübner. Verz. Schm.* 314.

*Gnophos*, p., *Treit.*

*Boletobia*, *Boisd. Ind.* 201; *Herr.-Sch.*; *Guen. Phal.* i. 330.

*Fidonia*, p., *Steph.*

Body slender. Proboscis short. Palpi broad, acute, villose-hirsute, extending far beyond the head; joints indistinct. Antennæ of the male broadly pectinated; branches long, slender, regular,

## 7. GEOMETRA DIFFISSA.

**Mas et fœm.** *Flava, vix viridescens; caput rufescens; palpi caput longe superantes, articulo 3o brevi; alæ anticae plaga marginali elongatæ cinereo-rufa antica coarctata strigasque duas emittente.* **Mas.**—*Antennæ latissime pectinatæ.* **Fœm.**—*Alæ puncto discali albo, punctis tribus rufis apud marginem interiorem; anticae plaga antice albo notata; posticae striga marginali apicali rufa.*

**Male and female.** Yellow, hardly tinged with green. Head reddish. Palpi extending much beyond the head; third joint in the male about one-fourth of the length of the second. Antennæ of the male very broadly pectinated. Fore wings with an elongated cinereous-red patch, which is straightened in front and emits two streaks nearly to the costa. **Female.**—Wings with two lines indicated much as in the preceding species. Fore wings with a white mark on the straightened part of the patch. Hind wings with a red streak along the apical margin. Length of the body  $4\frac{1}{2}$  lines; of the wings 12 lines.

**a, b.** St. Domingo. From Mr. Hearse's collection.

## 8. GEOMETRA SUBCELATA.

**Mas et fœm.** *Flavescenti-viridis; caput rufescens, vertex albo; palpi oblique ascendentes, articulo 3o brevi; alæ puncto discali albo rufo marginato, fimbria aurato-flava; anticae puncto interiore nigro.* **Mas.**—*Antennæ latissime pectinatæ; alæ anticae plaga marginali roseo-cinerea strigam emittente.* **Fœm.**—*Alæ anticae lituris duabus disjunctis magis determinatis ex parte albis.*

**Male and female.** Yellowish green, yellow beneath. Head reddish, white about the eyes and with a white vertex. Palpi obliquely ascending; third joint elongate-conical, about one-fourth of the length of the second. Antennæ of the male very broadly pectinated, simple at the tips. Wings with a white red-bordered discal point; fringe gilded yellow. Fore wings with a black point in the disk near the base. **Male.**—Fore wings with a rosy cinereous patch by the exterior border, limited by dark red on the inner side and emitting a like-coloured subapical streak. **Female.**—Fore wings with two marks like those of the male, but smaller, separate, more white and more definite. Length of the body 5 lines; of the wings 12 lines.

**a, b.** St. Domingo. From Mr. Tweedie's collection.



## 9. GEOMETRA FACTARIA.

**Mas.** *Late viridis, crassa, subtus flava; corpus subtus album; vertex roseo-albus; palpi porrecti, articulo 3o brevissimo; antennæ latissime pectinatæ, apice simplices; abdomen apice cervinum; pedes supra rosei; alæ lineis duabus obscurioribus rectis obliquis parallelis indistinctis, puncto discali albo; anticæ puncto discali interiore nigro, striga marginali subapicali saturate rufa.*

**Male.** Bright green, very stout, yellow beneath. Body white beneath. Vertex rosy white. Palpi rosy, porrect, extending beyond the head; third joint hardly one-fourth of the length of the second. Antennæ very broadly pectinated, except at the tips. Abdomen fawn-coloured at the tip. Legs rosy above. Wings with a white discal point and with two indistinct straight oblique parallel darker green lines; fringe greenish cinereous, shining; under side with a red apical patch, which is whitish-tinged in the fore wings. Fore wings with a black discal point near the base, with a deep red subapical streak on the exterior border, and with the adjoining fringe cinereous-red and white-tipped. Length of the body  $4\frac{1}{2}$ —5 lines; of the wings 11—12 lines.

This and the three preceding species can only be regarded as subspecies, or as races, or as having had a recent, common origin.

a, b. St. Domingo. From Mr. Tweedie's collection,

c. St. Domingo. From Mr. Hearse's collection.

d. St. Domingo. From M. Sallé's collection.

## 10. GEOMETRA CONGRUATA.

**Fœm.** *Late viridis, subglaucescens; caput antice roseum, vertice albo; palpi porrecti, graciles, articulo 3o longissimo; abdomen roseum, apice album; alæ vix latæ, puncto discali fusco, linea marginali rosea, fimbria alba; anticæ acutæ, costa alba roseo marginata.*

**Female.** Bright green, with a slight glaucous tinge, paler beneath. Head rosy in front; vertex white. Palpi porrect, slender, extending far beyond the head; third joint linear, as long as the second. Abdomen rosy, white towards the tip. Hind tibiae with four long spurs. Wings hardly broad, with a brown discal point, with a rosy marginal line and with a white fringe. Fore wings acute; costa white, rosy-bordered; exterior border hardly

convex, rather oblique. Hind wings extending beyond the abdomen. Length of the body  $3\frac{1}{4}$  lines; of the wings 10 lines.

a. St. Domingo. From Mr. Tweedie's collection.

### South America.

The following species much resembles the first West Indian group in structure.

#### 11. GEOMETRA BASIPLAGA.

*Fœm. Læte viridis; caput antice rufescens, vertice punctisque duobus anterioribus albis; palpi porrecti, articulo 3o nigro lanceolato; abdomen albidum; alæ puncto discali nigro, linea exteriori recta obliqua alba; antica subfalcata, plaga basali magna cinereo-rufescente, costa albida, margine interiore basi flavescente; postica margine interiore pallide luteo.*

*Female.* Vivid green, whitish beneath. Head reddish towards the palpi; vertex and a point on each side of the front white. Palpi porrect, extending beyond the head; third joint black, lanceolate, much shorter than the second. Thorax yellowish hindward. Abdomen whitish. Knees and tips of the tibiae black. Wings with a black discal point and with a white straight oblique exterior line, which diverges slightly hindward from the exterior border; fringe whitish, mingled with green. Fore wings subfalcate, with a large reddish cinereous-tinged basal patch, which does not extend to the interior border; the latter yellowish towards the base; costa whitish. Hind wings with the interior border pale luteous, diverging much from the abdomen. Length of the body 5 lines; of the wings 14 lines.

Brazil. In Mr. Saunders' collection.

### South Africa.

The three following species form three groups, of which the third has some resemblance to the genus *Phorodesma*.

## 12. GEOMETRA DIGRESSA.

**Fœm.** *Glauco-viridis; caput cervinum; vertex, thorax et abdomen alba; palpi porrecti, graciles, articulo 3o longissimo; tibiæ posticæ calcaribus parvis; alæ strigis transversis lineaque exteriorè obliqua albidis indistinctis; anticæ acutæ, costâ albida; posticæ lineâ exteriorè flexa, margine exteriorè subangulato.*

**Female.** Sea-green. Head fawn-colour; vertex, thorax and abdomen white. Palpi porrect, slender, extending far beyond the head; third joint nearly as long as the second. Hind tibiæ with four short spurs. Wings ample, with indistinct transverse whitish streaks; exterior line whitish, oblique, indistinct, straight in the fore wings, bent hindward in the hind wings; fringe whitish. Fore wings acute; costa and exterior border straight, the former whitish. Hind wings with the exterior border slightly angular; interior angle prominent. Length of the body 5 lines; of the wings 14 lines.

**α. Port Natal.** From M. Gueinzus' collection.

## 13. GEOMETRA DISCERPTA.

**Mas.** *Pallide viridis, subtus alba nitens; caput rubrum, vertice albo; palpi porrecti, brevissimi; thorax antice abdominisque discus rufescentes; pedes rosei, tibiis posticis quadriculcatis; alæ elongatæ, gutta discali lineaque marginali purpurascens-rufis; anticæ vix acutæ, costâ pallide lutea, margine exteriorè perobliquo.*

**Male.** Bright pale green, white and shining beneath. Head deep red; vertex white. Palpi porrect, not extending beyond the head; third joint extremely minute. Thorax reddish in front. Disk of the abdomen mostly red. Legs rosy; hind tibiæ with four long spurs. Wings elongate; discal dot and marginal line purplish red; fringe white, shining, purplish red at the base. Fore wings hardly acute: costa straight, pale luteous, reddish-tinged; exterior border almost straight, very oblique. Hind wings extending much beyond the abdomen, with the exterior border convex. Length of the body  $4\frac{1}{2}$  lines; of the wings 14 lines.

**Cape.** In Mr. Saunders' collection.

## 14. GEOMETRA DEVOCATA.

**Mas.** *Pallide viridis; corpus albidum; caput cervinum; palpi porrecti, brevissimi; antennæ pectinatae, apice filiformes; alæ lunulis marginalibus maculaque apud angulum anteriorem fuscis, fimbria cinerea; anticæ vix acutæ, costa cinerea fusco conspersa.*

**Male.** Bright pale green. Body whitish. Head fawn-colour. Palpi porrect, very short; third joint extremely minute. Antennæ pectinated nearly to the tips. Wings with brown marginal lunules, of which the hindmost by the interior angle is enlarged, and especially so in the fore wings; fringe cinereous. Fore wings hardly acute; costa and exterior border slightly convex; the former cinereous, brown-speckled. Hind wings extending beyond the abdomen. Length of the body 5 lines; of the wings 14 lines.

**a. Caffraria.** From M. Becker's collection.

## Hindustan.

In this region and in China and Australasia the genus has its greatest development, and there is a transition from the largest and most characteristic species to the first European form.

## 15. GEOMETRA SPECULARIA.

**Mas.** *Læte viridis, subtus albida; caput albo fasciatum, anticæ ferrugineum; pedes nigro-cincti; alæ linea exteriori indistincta saturatiore; anticæ puncto discali atro, linea interiori indistincta; posticæ spatio basali lutescente, striga discali carnea nigricante marginata punctum atrum includente.*

*Geometra specularia*, Guen. *Phal.* i. 342, 525.

**a. Ceylon.** From Mr. Stevens' collection.

**b. Java.** Presented by the Secretary of the India Board.

**c. Sumatra.** From Sir Stamford Raffles' collection.

## 16. GEOMETRA AVICULARIA.

*Viridis, subtus pallida; frons saturate viridis; palpi apices versus nigricantes; alæ vittis areolaribus cervinis flavescente marginatis, lunulis marginalibus nigro-fuscis, fimbria cinerea; posticæ litura discali angulosa ferruginea.*

*Geometra avicularia*, Guen. *Phal.* i. 342, 526.

a. Darjeeling. Presented by the Secretary of the India Board.

### 17. GEOMETRA RECIPROCATÆ.

**Mas.** *Flavescens*; palpi porrecti, angulati, articulo 2o apice fusco, 3o nigricante; antennæ pectinatæ; abdominis fasciculus apicalis longiusculus; tibiæ posticæ vix incrassatæ; alæ extus virides, gutta discali, lineæ exteriorē fasciæque submarginali nigricantibus; anticæ valde falcatæ, puncto discali fusco, lineæ exteriorē angulosa obliqua albida intus concisa extus valde diffusa, margine exteriorē recto valde obliquo; posticæ abdomen vix superantes, margine exteriorē vix flexo.

**Male.** Yellowish. Front convex, prominent. Palpi porrect, extending very little beyond the head; second joint brown above towards the tip; third blackish, short, conical, decumbent, forming an angle with the second. Antennæ pectinated, mutilated in the specimen described. Abdomen with a rather long apical tuft. Hind tibiæ hardly thickened. Wings mostly grass-green exteriorly; under side with a discal dot, an exterior line and a submarginal band blackish; line obsolete towards the costa of the fore wings and towards the interior border of the hind wings; band composed of spots in the hind wings, represented in the fore wings by two spots near the interior angle. Fore wings very falcate, with a brown discal point and with an oblique exterior whitish zigzag line, which is concise on the inner side, very diffuse on the outer side; costa convex exteriorly; exterior border straight, except at the tip, very oblique. Hind wings hardly extending beyond the abdomen, with the exterior border hardly bent. Length of the body 10 lines; of the wings 25 lines.

a. Himalaya Mountains. From Mr. Leadbeater's collection.

### 18. GEOMETRA VIRIDILUTEATA.

**Mas et fœm.** *Saturate viridis*; corpus luteum; alæ lineolis longitudinalibus basi que luteis, subtus ex maxima parte rufescentes aut luteæ; anticæ valde falcatæ, plaga subtus apud angulum interiorem rufescente-ferruginea; posticæ fascia subtus latissima submarginali rufescente-ferruginea.

**Male and female.** Deep green. Body and basal part of the wings luteous. Wings irregularly and longitudinally luteous-

speckled; under side with a red straight oblique line, between which and the base the space is mostly reddish or luteous. Fore wings very falcate; under side with a reddish ferruginous patch by the interior angle. Hind wings beneath luteous towards the base and with a very broad submarginal reddish ferruginous band. *Male*.—Palpi ascending, rising higher than the vertex; third joint very short. Antennæ slightly pectinated. *Female*.—Palpi porrect; third joint almost as long as the second. Length of the body 9 lines; of the wings 26—30 lines.

a. Darjeeling. Presented by the Secretary of the India Board.

b. Hindostan. Presented by E. Doubleday, Esq.

### 19. GEOMETRA PENNISIGNATA.

*Fœm.* *Læte viridis; vertex albus; palpi porrecti, cervini, articulo 3o longissimo; pedes albi, tibiis apice genubusque nigris; alæ amplæ, litura discali ferruginea flavescens marginata, linea marginali tenuissima flava, fimbria rufescente-cinerea basi nigra; anticæ acutæ, costa alba, litura discali interrupta; posticæ litura discali angulosa.*

*Female.* Vivid green, paler beneath. Vertex, antennæ and body beneath white. Palpi porrect, fawn-colour; third joint rather shorter than the second. Legs white; knees and tips of tibiæ black; spurs long. Wings ample, with a ferruginous yellowish-bordered discal mark, and with a very slender yellow marginal line; fringe reddish cinereous, black at the base. Fore wings acute; costa white, straight; exterior border hardly convex; discal mark forming a dot with a little curved streak in front of it. Hind wings with the discal mark like that of *G. avicularia*, resembling the figure of a bird flying afar off. Length of the body  $7\frac{1}{2}$  lines; of the wings 20 lines.

Closely allied to *G. avicularia*.

a. Nepaul. Presented by Major-General Hardwicke.

### 20. GEOMETRA DIMISSA.

*Mas.* *Glaucoviridis, robusta, subtus flavescens suffusa; caput luteum, vertice albo; palpi fusci, articulo 3o minimo; antennæ subpectinatæ; thorax antice sublutescens; alæ amplæ, lineis duabus obliquis albidis lanceolatis lunulatis, linea sub-*

*marginali valde indistincta, margine exteriori subtestaceo; anticæ valde falcatae, costa albido-testacea apicem versus convexa, margine exteriori subconcavo; posticæ margine interiori albido-testaceo.*

**Male.** Glaucous-green, stout, with a yellowish tinge beneath. Head luteous; vertex white. Palpi brown; third joint very minute. Antennæ slightly pectinated. Thorax with a pale luteous tinge in front. Wings ample; interior and exterior lines oblique whitish, denticulate, lanceolate, the latter more distinct than the former; submarginal line very indistinct; exterior border testaceous-tinged. Fore wings very falcate; costa whitish testaceous, very convex towards the tip; exterior border slightly concave. Hind wings with the exterior border convex; interior border whitish testaceous. Length of the body 9½ lines; of the wings 22 lines.

**a.** North Hindostan. From Colonel Buckley's collection.

## 21. GEOMETRA DISCISSA.

**Mas.** *Glauco-viridis, subtus albida; caput ferrugineo-fuscum, vertice albo; palpi porrecti, articulo 3o brevissimo; antennæ pectinatae, triente apicali filiformi; pedes postici tibiis tarsisque incrassatis dense villosis; alæ lituris plurimis transversis indistinctis albidis, punctis marginalibus nigris, fimbria cinerea basi ferruginea; anticæ acutæ, costa alba; posticæ puncto discali albo, margine exteriori subangulato.*

**Male.** Glaucous-green, whitish beneath. Head ferruginous-brown; vertex white. Palpi porrect, extending a little beyond the head; third joint not more than one-fourth of the length of the second. Antennæ pectinated to nearly two-thirds of the length. Abdomen whitish. Hind tibiæ and hind tarsi incrassated, densely pilose. Wings ample, with numerous transverse indistinct whitish marks; marginal points black; fringe cinereous, ferruginous at the base. Fore wings acute; costa and exterior border straight, the former white. Hind wings extending beyond the abdomen, with a white discal point; exterior border slightly angular. Length of the body 7 lines; of the wings 18 lines.

**a.** Hindostan. From Archdeacon Clerk's collection.

**b.** North Hindostan. From Mr. James' collection.

v

## 22. GEOMETRA HALIARIA.

**Fœm.** *Læte viridis; caput cervinum, vertice albo; palpi porrecti, brevissimi; tibiæ posticæ calcaribus quatuor parvis; alæ elongatæ, linea recta obliqua fimbriaque albis; anticæ acutæ, linea interiore subrecta vix obliqua costaque albis; posticæ margine exteriori vix flexo.*

**Female.** Vivid green, paler beneath. Head fawn-colour; vertex white. Palpi porrect, very short, not extending beyond the head; third joint extremely minute. Antennæ and legs white; hind tibiæ with four short spurs. Wings ample, elongate, with a straight well-defined white line, which extends from near the tips of the fore wings to the middle of the interior border of the hind wings; fringe white. Fore wings acute, with a slight nearly straight and upright white line, which is near the base; costa white, slightly convex; exterior border straight, very oblique. Hind wings with the exterior border hardly bent. Length of the body 6 lines; of the wings 18 lines.

**a. Hindostan.** From Major Parry's collection.

## 23. GEOMETRA DETENTA.

**Fœm.** *Pallide viridis, subtus alba; palpi porrecti, subflexi, caput longe superantes, articulo 3o elongato lineari; alæ puncto discali fusco, linea marginali rufa albo notata, fimbria cinerea basi rufescente; anticæ acutæ, costa lineisque duabus subrectis subparallelis non obliquis albis, linea marginali apud angulum interiorem dilatata; posticæ linea marginali apice dilatata.*

**Female.** Pale green, white beneath. Palpi porrect, slightly bent, extending far beyond the head; second joint stout; third joint slender, linear, about half the length of the second. Wings ample, with a brown discal point; marginal festoon red, marked with white, dilated by the interior angle of the fore wings and at the tips of the hind wings; fringe cinereous, reddish at the base. Fore wings acute, with two white upright nearly straight and parallel lines, which are very remote from each other; costa white, slightly convex. Hind wings extending much beyond the abdomen; interior angle rather prominent. Length of the body 6 lines; of the wings 16 lines.

**a. Nepaul.** Presented by Major-General Hardwicke.



## 24. GEOMETRA DISSITA.

**Mas et fœm.** *Pallidissime viridis* ; caput cervinum, vertice albo ; palpi porrecti, caput paullo superantes, articulo 3o lanceolato ; antennæ maris pectinatæ, triente apicali filiformi ; tibiæ posticæ calcaribus quatuor brevissimis ; alæ semihyalinæ, strigis transversis albidis valde indistinctis, linea media indistincta subrecta vix obliqua postice flexa et angulata ; anticæ acutæ ; posticæ margine exteriori subangulato.

*Male and female.* Very pale green ; body and under side still paler. Head fawn-colour ; vertex white. Palpi porrect, extending a little beyond the head ; third joint lanceolate, less than half the length of the second, rather longer in the female. Antennæ of the male pectinated to two-thirds of the length. Hind tibiæ with four very short spurs. Wings ample, semihyaline, pale glaucous-green, with very indistinct transverse whitish streaks, and with an indistinct nearly straight and upright transverse middle line, which is obsolete towards the costa of the fore wings, and is angular and bent towards the interior border of the hind wings. Fore wings acute ; costa and exterior border straight. Hind wings with the exterior border slightly angular in the middle. Length of the body 5—6 lines ; of the wings 14—16 lines.

- a. Canara. Presented by S. N. Ward, Esq.
- b. Canara. Presented by the Secretary of the India Board.
- c. North Hindostan. From Mr. Stevens' collection.

## 25. GEOMETRA SATURATARIA.

This species is separated from *Geometra* and forms the genus *Celenna* in the lately published list of Ceylon insects, but as it is not more distinct from the typical form of *Geometra* than are several other groups of that genus it is here re-united to it. It has some resemblance in structure to the largest Hindostan species.

**Mas.** Corpus crassum. Proboscis longiuscula. Palpi oblique ascendentes, verticem non superantes ; articulus 3us minimus. Antennæ late pectinatæ, apice filiformes. Pedes robusti, non longi ; tibiæ posticæ calcaribus quatuor breviusculis. Alæ amplæ, densæ, integræ ; anticæ elongatæ, subfalcatæ, costa subconvexa, margine exteriori recto.

**Male.** Body very robust. Proboscis rather long. Palpi obliquely ascending, not rising so high as the vertex; third joint very minute, less than one-fourth of the length of the second. Antennæ broadly pectinated to four-fifths of the length. Legs stout, not long; hind tibiæ with four rather short spurs. Wings ample, thick, entire. Fore wings elongate, subfalcate; costa slightly convex; exterior border straight. Hind wings with the interior angle prominent.

**Mas.** *Obscure cervina, subtus ochracea; alæ chalybeæ subtinctæ, strigis transversis nigris, fascia lata informi obliqua saturate viridi nigro albidoque marginata; antice macula antica exteriore saturate viridi, strigis subtilis transversis nigris postice confluentibus.*

**Male.** Dull fawn-colour, ochraceous beneath. Wings slightly chalybeous-tinged, transversely blackish streaked, with a deep green broad oblique irregular black and whitish-bordered band, which does not extend to the costa of the fore wings. Fore wings with a large spot in front near the outer side of the band, and like it in colour; under side with transverse black streaks, which are confluent and form a patch near the interior angle. Length of the body 5 lines; of the wings 14 lines.

a. Ceylon. Presented by Dr. Templeton.

b. Silhet. From the Rev. J. Stainforth's collection.

## 26. GEOMETRA DISPARTITA.

**Mas.** *Pallide viridis, subtus albida; caput cervinum, vertice albo; palpi porrecti, brevissimi; antennæ subserratæ; alæ litura discali tenui lineaque exteriore obliqua albis; antice acutæ, linea recta; postice linea arcuata.*

**Male.** Pale green, whitish beneath. Head fawn-colour; vertex white. Palpi porrect, very short, not extending beyond the head; third joint extremely minute. Antennæ minutely serrated. Wings with a slight white discal mark, and with an oblique exterior white line, which is nearly straight in the fore wings, but curved in the hind wings. Fore wings acute, with the costa very slightly convex; exterior border straight, very oblique. Length of the body 5 lines; of the wings 14 lines.

Hindustan. In Mr. Saunders' collection.

## 27. GEOMETRA DETRACTA.

**Mas.** *Glaucoviridis, subtus viridescens-alba; palpi porrecti, caput vix superantes, articulo 3o minimo; antennae late pectinatae; tibiae posticae calcaribus quatuor parvis; alae lineis interiore et exterioribus albidis denticulatis indistinctis incompletis, fimbria alba; anticae peracutae, costa alba, margine exterioris perobliquo; posticae angulatae.*

**Male.** Glaucous-green, greenish white beneath. Palpi porrect, hardly extending beyond the head; third joint very minute. Antennae broadly pectinated. Hind tibiae with four short spurs. Wings with the interior and exterior lines whitish, denticulated, indistinct, incomplete; fringe white. Fore wings very acute; costa white, straight; exterior border straight, very oblique. Hind wings with an angle on the middle of the exterior border. Length of the body 4 lines; of the wings 12 lines.

**a.** North Hindostan. Presented by Capt. Strachey.

## 28. GEOMETRA DISSESSA.

**Fœm.** *Lute viridis, sat robusta; palpi cinereo-cervini, caput longe superantes, articulo 3o elongato; abdomen albidum, disco cervino; tibiae posticae calcaribus quatuor parvis; alae linea marginali rufa, fimbria cinerea rufo interlineata; anticae acutae, lineis duabus subrectis vix obliquis costaque albidis, punctis marginalibus nigris; posticae punctis marginalibus elongatis albidis.*

**Female.** Bright green, rather stout, whitish beneath. Palpi porrect, cinereous fawn-colour, extending far beyond the head; third joint linear, much more slender than the second and a little more than half its length. Abdomen whitish; disk tinged with fawn-colour. Hind tibiae with four minute spurs. Wings with a red marginal line; fringe cinereous, interlined with red. Fore wings acute, with two whitish nearly straight and upright lines, which are remote from each other; costa whitish; exterior border with minute black points. Hind wings with whitish elongate points along the exterior border, which is very convex; interior angle prominent. Length of the body 4 lines; of the wings 12 lines.

**a.** Punjaub. Presented by General Hearsay.

## Ceylon.

The following species has some resemblance to the genera *Comibana* and *Thalera*.

## 29. GEOMETRA MERITARIA.

**Fœm.** *Glauco-viridis, subtus albida; caput et abdomen albida palpi angulati, caput sat superantes, articulo 3o longissimo. tibiæ posticæ calcaribus quatuor breviusculis; alæ maculæ discali lineæque marginali ochraceis chalybeo notatis flavescente marginatis, fimbria flavescente; anticæ viz acutæ costa flavescente-ochraceo notata, guttis duabus apud marginem interiorem flavescensibus rufo semimarginatis; posticæ guttis tribus, margine exteriori angulato.*

**Female.** Glaucous-green, whitish beneath. Head and abdomen white. Palpi angular, extending some distance beyond the head; third joint as long as the second. Hind tibiæ with four rather short spurs. Wings with the discal spot and the marginal line ochraceous, chalybeous-spangled, yellowish-bordered; fringe yellowish. Fore wings hardly acute; costa and exterior border hardly convex; the former yellowish, ochraceous-speckled; two yellowish half red-bordered dots by the interior border; these dots like those of the hind wings, are indications of the usual lines. Hind wings with the discal spot larger than that of the fore wings; three exterior dots, two of them in the disk; exterior border angular. Length of the body  $3\frac{1}{2}$  lines; of the wings 10 lines.

a. Ceylon. Presented by Dr. Templeton.

## China.

The following species, which is the largest of the genus, seems to connect the typical species of Hindostan with those of Australasia.

## 30. GEOMETRA CONFUCIARIA.

**Fœm.** *Saturate glauco-viridis, robusta, subtus flavescens-viridis; caput saturate prasinum, apud oculos luteum; palpi caput longe superantes, articulo 3o nigro elongato; abdomen albid-*

*testaceum; pedes albo varii, tibiis anticis apice genubusque nigris, tarsis anterioribus nigris albo cinctis; alæ patulæ, albo conspersæ, puncto discali nigro, lineis tribus albis angulosis obliquis, gutta discali lineaque exteriori recta obliqua subtus nigris; anticæ falcatæ; posticæ linea submarginali subtus e guttis diffusis nigricantibus.*

*Female.* Deep sea-green, thick, yellowish green beneath. Head deep grass-green, luteous about the eyes. Palpi slightly ascending and angular, extending far beyond the head; second joint very stout, black at the tip; third black, linear, full half the length of the second. Abdomen whitish testaceous, white beneath. Legs partly white; knees black; fore tibiæ black towards the tips; anterior tarsi black, with white tips to the joints. Wings very ample, with a black discal point; interior, exterior and submarginal lines white, zigzag, oblique; white hairs numerous, mostly between the exterior and submarginal lines; under side with a black discal dot and with a black straight oblique exterior line. Fore wings very falcate; costa curved towards the tip; exterior border straight, except towards the tip. Hind wings with the submarginal line indicated beneath by diffuse blackish dots; exterior border convex; interior angle prominent. Length of the body 10 lines; of the wings 30 lines.

*a.* North China. From Mr. Fortune's collection.

### 31. GEOMETRA DIJUNCTA.

*Mas.* *Pallidissime viridis, subtus alba; caput rufescens, vertice albo; palpi erecti, subarcuati, brevissimi; antennæ late pectinatae; pedes breviusculi; tibiæ posticæ calcaribus quatuor longis; alæ linea exteriori alba recta indistincta; anticæ valde acutæ; posticæ margine exteriori angulato submarginato.*

*Male.* Very pale green, white beneath. Head reddish; vertex and abdomen white. Palpi vertical, slightly curved, not rising so high as the vertex; third joint acute, not more than one-fourth of the length of the second. Antennæ broadly pectinated. Legs rather short; hind tibiæ with four long spurs. Wings ample, with an indistinct white straight oblique exterior line. Fore wings very acute; costa and exterior border hardly convex. Hind wings with the exterior border slightly emarginate, distinctly angular. Length of the body 7 lines; of the wings 18 lines.

*a.* North China. From Mr. Fortune's collection.

## Java.

One species, which exactly resembles *G. reciprocata* and *G. viridiluteata* in structure.

## 32. GEOMETRA LUTEOVIRIDATA.

**Mas.** *Lutea, robusta; fasciculus frontalis apice ferrugineus; palpi porrecti, supra ferruginei, apice nigricantes; antennae subpectinatae, apices versus nude; alae amplae, extus viridi conspersae, fimbria fusca extus pallide cinerea; anticae valde falcatae, punctis duobus discalibus nigricantibus, costa apicem versus valde convexa, margine exteriori recto, vitta subtus subcostali purpurascens-fusca; posticae abdomen paullo superantes, linea subtus flava indistincta, fascia exteriori albida indistincta, fascia adhuc exteriori informi rufescente-ferruginea.*

**Male.** Luteous, stout, much paler beneath. Frontal tuft prominent, ferruginous at the tip. Palpi porrect, ferruginous above, with blackish tips, extending somewhat beyond the head; third joint very minute. Antennae slightly pectinated to somewhat beyond the middle. Hind tibiae slightly thickened. Wings ample; marginal space with grass-green speckles, which are here and there confluent; fringe brown, pale cinereous exteriorly. Fore wings extremely falcate, with two blackish discal points; costa very convex towards the tip; exterior border quite straight, except at the tip; under side with an irregular subcostal purplish brown stripe, which is bounded by a straight oblique ferruginous line. Hind wings extending a little beyond the abdomen; interior angle somewhat prolonged; under side with an exterior indistinct yellow line adjoining a more exterior indistinct whitish band, the latter having beyond it an irregular reddish ferruginous band. Length of the body 9 lines; of the wings 23 lines.

**a. Java.** From Mr. Argent's collection.

## Borneo.

Among the following species there are some forms which are peculiar to this island; others, and *G. subignita* especially, have the structure of *G. Confuciarum*.

## 33. GEOMETRA SUBIGNITA.

**Fœm.** *Saturate viridis, robusta, subtus albida; caput albidum; palpi nigricantes, caput longe superantes; alæ lineis duabus albis denticulatis, 2a valde incompleta, subtus rufescente-cinerea spatio marginali saturate rufo linea intermedia alba, fimbria albida basi nigricante; anticae valde falcatae, linea interiore duplicata puncta dua discalia nigra includente; posticae margine interiore inciso.*

**Female.** Deep green, robust, whitish beneath. Head whitish beneath. Head whitish; frontal tuft prominent. Palpi porrect, blackish, extending far beyond the head; third joint as long as the second. Legs long. Wings ample, with two denticulated white lines; exterior line very incomplete; discal mark black, distinct on the under side, where the wings are reddish cinereous, which hue is separated by a white line from the deep red marginal part; fringe whitish, blackish at the base. Fore wings very falcate; interior line double, including a white-speckled space and two black discal points. Hind wings extending far beyond the abdomen; interior border notched towards the tip; interior angle prominent. Length of the body 9 lines; of the wings 24 lines.

Sarawak, Borneo. In Mr. Saunders' collection.

## 34. GEOMETRA PENICILLATA.

**Mas.** *Saturate glauco-viridis, robusta; caput antice ferrugineum, vertice albido; palpi caput vix superantes, articulo 3o brevissimo; antennæ pectinatae, apice filiformes; abdomen postice album, penicillis subtus duobus lateralibus basalibus; pedes breves, robusti, tibiis posticis fimbriatis; alæ strigis transversis albidis plurimis vix conspicuis, lineis duabus subobsoletis; anticae acutæ, costa lutea; posticae subtus basi luteæ, margine exteriori subangulato.*

**Male.** Deep glaucous-green, stout. Head ferruginous in front; vertex whitish. Palpi hardly extending beyond the head; third joint very short. Antennæ pectinated to two-thirds of the length. Abdomen whitish on each side and towards the tip, with a fan-shaped tuft on each side at the base beneath. Legs short, stout; hind tibiæ fringed. Wings ample, with numerous and very indistinct transverse whitish streaks; two still more indistinct and almost obsolete deep green lines; fringe cinereous. Fore wings

acute; costa luteous, straight; exterior border straight. Hind wings extending beyond the abdomen, luteous beneath towards the base; exterior border slightly angular. Length of the body 8 lines; of the wings 20 lines.

Sarawak, Borneo. In Mr. Saunders' collection.

### 35. GEOMETRA ARGENTIFUSA.

*Mas. Saturate viridis, robusta, subtus flavescens-viridis; caput linea transversa albida; palpi oblique ascendentes, articulo 3o minimo; antennæ subpectinatae, apice filiformes; abdomen argenteo subtinctum, subtus album; pedes longi, graciles; alae fasciis exteriori et submarginali argenteis obliquis diffusis, hac informi; anticae valde falcatae, strigis nonnullis interioribus argenteis non obliquis.*

*Male.* Deep green, robust, yellowish green beneath. Head with a transverse whitish line between the antennæ; fore part and palpi dark green; the latter obliquely ascending, with the third joint very minute. Antennæ slightly pectinated to two-thirds of the length. Abdomen slightly tinged with silvery hindward, white beneath. Legs long, slender. Wings ample; exterior and submarginal bands silvery, oblique, diffuse, the latter irregular, the former emitting streaks along the veins in the hind wings; discal mark dark green, distinct on the under side. Fore wings very falcate, with some interior upright silvery streaks. Hind wings extending much beyond the abdomen, with the interior angle very prominent. Length of the body 7 lines; of the wings 18 lines.

Sarawak, Borneo. In Mr. Saunders' collection.

### 36. GEOMETRA SUBMONSTRANS.

*Mas et fœm. Læte viridis; caput albo fasciatum; palporum articulus 3us nigricans; alae lineis interiore et exteriori obscurioribus indistinctis vix undulatis, puncto discali ferrugineo, linea marginali cervina fusco marginata, fimbria alba; antica acuta, costa albida. Mas.—Antennæ pectinatae; palpi erecti, articulo 3o breviores. Fœm.—Palpi porrecti, articulo 3o longiore; alae posticae litura discali angulata.*

*Male and female.* Bright green, a little paler beneath. Head with a white band between the antennæ. Third joint of the palpi blackish. Wings ample; interior and exterior lines indistinct, deeper green,



hardly undulating, slightly oblique; discal point ferruginous, forming an angular streak in the hind wings of the female; marginal line fawn-coloured, bordered with dark brown on the outer side; fringe white. Fore wings acute; costa whitish; exterior border straight. Hind wings extending beyond the abdomen; interior angle prominent. *Male*.—Palpi vertical; third joint less than half the length of the second. Antennæ pectinated to two-thirds of the length. *Female*.—Palpi porrect; third joint more than half the length of the second. Length of the body 7—8 lines; of the wings 16—18 lines.

a. Sarawak, Borneo. From Mr. Wallace's collection.

### 37. GEOMETRA CONTINUA.

*Fœm. Subtestacea; palpi breves, subangulati, articulo 3o longiusculo; pedes longiusculi, sat graciles; alæ subnitentes strigis nonnullis lineisque transversis obscurioribus vix conspicuis, puncto discali nigricante, marginali lunulisque marginalibus subtilis nigris; anticæ vix dentatæ; posticæ subdentatæ.*

*Female.* Dull testaceous, hardly paler beneath. Frontal tuft prominent. Palpi short, slightly angular; third joint about half the length of the second. Legs rather long and slender; hind tibiæ with four long spurs. Wings slightly shining, with transverse rather darker streaks, and with two or three lines of the same hue, all very indistinct; marginal line purplish red; fringe whitish; discal point blackish. Fore wings elongate, nearly subfalcate; exterior border convex. Hind wings with the interior angle rather prominent. Length of the body 5—6 lines; of the wings 14—16 lines.

Sarawak, Borneo. In Mr. Saunders' collection.

### 38. GEOMETRA CINCTA.

*Fœm. Læte prasina; caput albo fasciatum; palpi cinerei, articulo 3o longo nigro; alæ lineis duabus obscurioribus approximatis subobliquis fere rectis, linea marginali cervina, lunulis marginalibus obscure fuscis, fimbria fuscescente-cinerea; anticæ vix acutæ, puncto discali obscuro, costa fuscescente-cinerea fusco conspersa.*

*Female.* Bright grass-green, hardly paler beneath. Head white between the antennæ. Palpi cinereous; third joint black, a

convex, rather oblique. Hind wings extending beyond the abdomen. Length of the body  $3\frac{1}{2}$  lines; of the wings 10 lines.

a. St. Domingo. From Mr. Tweedie's collection.

### South America.

The following species much resembles the first West Indian group in structure.

#### 11. GEOMETRA BASIPLAGA.

*Fœm. Læte viridis; caput antice rufescens, vertice punctisque duobus anterioribus albis; palpi porrecti, articulo 3o nigro lanceolato; abdomen albidum; alæ puncto discali nigro, linea exteriori recta obliqua alba; antica subfalcata, plaga basali magna cinereo-rufescente, costa albida, margine interiore basi flavescente; postica margine interiore pallide luteo.*

*Female.* Vivid green, whitish beneath. Head reddish towards the palpi; vertex and a point on each side of the front white. Palpi porrect, extending beyond the head; third joint black, lanceolate, much shorter than the second. Thorax yellowish hindward. Abdomen whitish. Knees and tips of the tibiae black. Wings with a black discal point and with a white straight oblique exterior line, which diverges slightly hindward from the exterior border; fringe whitish, mingled with green. Fore wings subfalcate, with a large reddish cinereous-tinged basal patch, which does not extend to the interior border; the latter yellowish towards the base; costa whitish. Hind wings with the interior border pale luteous, diverging much from the abdomen. Length of the body 5 lines; of the wings 14 lines.

Brazil. In Mr. Saunders' collection.

### South Africa.

The three following species form three groups, of which the third has some resemblance to the genus *Phorodesma*.

## 12. GEOMETRA DIGRESSA.

**Fœm.** *Glauco-viridis; caput cervinum; vertex, thorax et abdomen alba; palpi porrecti, graciles, articulo 3o longissimo; tibiæ posticæ calcaribus parvis; alæ strigis transversis lineaque exteriorè obliqua albidis indistinctis; anticæ acutæ, costâ albida; posticæ lineâ exteriorè flexa, margine exteriorè subangulato.*

**Female.** Sea-green. Head fawn-colour; vertex, thorax and abdomen white. Palpi porrect, slender, extending far beyond the head; third joint nearly as long as the second. Hind tibiæ with four short spurs. Wings ample, with indistinct transverse whitish streaks; exterior line whitish, oblique, indistinct, straight in the fore wings, bent hindward in the hind wings; fringe whitish. Fore wings acute; costâ and exterior border straight, the former whitish. Hind wings with the exterior border slightly angular; interior angle prominent. Length of the body 5 lines; of the wings 14 lines.

**a.** Port Natal. From M. Gueinzus' collection.

## 13. GEOMETRA DISCERPTA.

**Mas.** *Pallide viridis, subtus alba nitens; caput rubrum, vertice albo; palpi porrecti, brevissimi; thorax antice abdominisque discus rufescentes; pedes rosei, tibiis posticis quadriculcatis; alæ elongatæ, gutta discali lineaque marginali purpurascente-rufis; anticæ vix acutæ, costâ pallide lutea, margine exteriorè perobliquo.*

**Male.** Bright pale green, white and shining beneath. Head deep red; vertex white. Palpi porrect, not extending beyond the head; third joint extremely minute. Thorax reddish in front. Disk of the abdomen mostly red. Legs rosy; hind tibiæ with four long spurs. Wings elongate; discal dot and marginal line purplish red; fringe white, shining, purplish red at the base. Fore wings hardly acute: costâ straight, pale luteous, reddish-tinged; exterior border almost straight, very oblique. Hind wings extending much beyond the abdomen, with the exterior border convex. Length of the body  $4\frac{1}{2}$  lines; of the wings 14 lines.

**Cape.** In Mr. Saunders' collection.

## Oceania ?

## 43. GEOMETRA SUBTINCTARIA.

Fœm. *Pomacea* ; *frons cervina* ; *alæ anticæ obtusæ, linea exte-  
riore e punctis albis* ; *posticæ rotundatæ, albæ, linea arcuata  
margineque exteriore viridibus.*

*Geometra subinctaria*, Guen. *Phal.* i. 345, 532.

Oceania ?

## Country unknown.

## 44. GEOMETRA LOXIARIA.

Mas. *Pallide viridis* ; *frons rufo tincta* ; *alæ linea unica tre-  
mula* ; *anticæ apice productæ, costa albo lineata, margine  
exteriore recto* ; *posticæ margine exteriore vix flexo, angulo  
interiore producto.*

*Geometra loxiaria*, Guen. *Phal.* i. 344, 530.

## 45. GEOMETRA REMOTARIA.

Mas. *Viridis* ; *corpus album* ; *palpi robusti, articulo 3o mi-  
nimo* ; *antennæ pectinatæ* ; *thorax viridis* ; *alæ puncto discali  
nigro, linea exteriore alba recta obliqua extus viridi saturato  
marginata* ; *anticæ acutæ, linea interiore alba* ; *posticæ mar-  
gine exteriore valde convexo.*

*Male.* Green. Body white. Palpi stout, extending very little beyond the head ; third joint conical, very minute. Antennæ moderately pectinated to three-fourths of the length. Thorax green. Hind tibiæ with four long spurs. Wings with a black discal point, and with a white straight oblique exterior line, which is bordered with deeper green on the inner side, and is nearer than is usual to the exterior border. Fore wings acute, with an interior white line ; costa and exterior border hardly convex. Hind wings with the exterior border very convex. Length of the body 4 lines ; of the wings 11 lines.

a. ——— ? From Mr. Milne's collection.

## Genus 4. NEMORIA.

Corpus gracile. Palpi squamosi, caput vix superantes, articulo 3o brevissimo. Antennæ maris pectinatæ aut ciliatæ. Abdomen læve, unicolor. Pedes robusti; tibiæ posticæ maris bicalcaratæ; tarsi fere glabri. Alæ integræ, virides, sæpe strigatæ, lineis indistinctis, puncto discali nullo.

Nemoria, *Hübner. Verz. Schm.* 285; *Leder.*; *Guen. Phal.* i. 345. Geometra, p., *Treit.*; *Dup.*; *Boisd.*; *Steph.*

Body slender. Palpi squamous, hardly extending beyond the head; third joint conical, very small. Antennæ of the male pectinated or ciliated. Abdomen smooth, of one colour, without markings. Legs robust; spurs short; hind tibiæ of the male with one pair of spurs; tarsi almost smooth. Wings entire, green, rather thick, often streaked; lines indistinct; no discal point.

## Europe.

Some of the following nine *Nemoria* are closely allied to each other, and cannot be distinguished in a Synopsis on account of the deficiency of species in the Museum collection.

## 1. NEMORIA VIRIDATA.

*Cinereo-viridis; caput ferrugineum; alæ linea exteriori subdenticulata albida; anticæ linea interiore indistincta albida.*

———, *Albin, Ins.* pl. 48, f. 80.

*Phalæna-Geometra viridata*, *Linn. Syst. Nat.* i. 2, 865, 230; *Faun. Suec.* 1256. *Gmel. ed. Syst. Nat.* i. 5, 2454, 230.

*Phalæna viridata*, *Scop. Ent. Carn.* 215, 530. *Fabr. Sp. Ins.* ii. 255, 79; *Mant. Ins.* ii. 198, 118; *Ent. Syst.* iii. 2, 170, 147.

*Geometra viridata*, *Wien. Verz.* 97, 7. *Brahm, Ins.* 175. *Bork. Eur. Schm.* v. 48, 18. *Hübner. Geom.* pl. 2, f. 11. *Treit. Schm.* vi. 107, 3. *Dup. Lep.* iv. 246, pl. 151, f. 4. *Steph. Ill. Brit. Haust.* iii. 316. *Boisd. Ind.* 180, 1423. *Herr.-Sch. Eur. Schm.* iii. 10, 9, f. 567.

*Geometra vernaria*, *Haw. Lep. Brit.* 300.

*Nemoria viridaria*, *Hübner. Verz. Schm.* 285, 2782. *Guen. Phal.* i. 346, 534.

*Geometra porrinaria*, Zell. *Ent. Zeit. Stett.* 1848, 273. *Herr.-Sch. Eur. Schm. Sup.* 63, f. 566.

a. England. Presented by S. Stevens, Esq.

b—g. England. From Mr. Stephens' collection.

h, i. England.

j, k. Scotland. From Mr. Dove's collection.

l—o. Europe. From M. Becker's collection.

p—r. ———?

## 2. NEMORIA CLORARIA.

*N. viridatæ simillima, paullo major; abdomen album; alæ posticæ margine exteriori minus flexo.*

*Geometra cloraria*, Hübn. *Geom.* f. 352.

*Nemoria cloraria*, Hübn. *Verz. Schm.* 285, 2784. *Guen. Phal. i.* 347, 535.

Germany.

## 3. NEMORIA MELINARIA.

*Late viridis; alæ linea exteriori obliqua denticulata alba; anticæ linea interiori alba antice abbreviata.*

*Geometra cloraria*, *Eversm. Faun. Volg.-Ural.* 347.

*Geometra herbaria?* *Boisd. Ind.* 180, 1425.

*Geometra melinaria*, *Herr.-Sch. Eur. Schm. Sup.* 63, pl. 67, f. 413.

*Nemoria melinaria*, *Guen. Phal. i.* 347, 536.

Ural Region.

## 4. NEMORIA BERYLLARIA.

*Geometra beryllaria*, *Herr.-Sch. Leder.*

*Nemoria beryllaria*, *Guen. Phal. i.* 348, 537.

The description of this species has not yet been published.

Beyrout.

## 5. NEMORIA ETRUSCARIA.

*Viridis; antennæ maris crenatæ, ciliatæ; alæ linea 1a obsoletissima; anticæ costa maris concolore, fœm. tenuissime pallida fusco punctata; posticæ linea 2a angulata albida.*

*Geometra etruscaria*, Zell. *Ent. Stett.* 1849, 203.

*Nemoria etruscaria*, *Guen. Phal. i.* 349, 540.

Italy.

## 6. NEMORIA PULMENTARIA.

*Pallide viridis; alæ lineis plurimis interruptis unaque integra subundulata albis.*

*Geometra cloraria*, Dup. *Lep.* v. 549, pl. 210, f. 1. *Treit. Schm. Sup.* 177. *Zell. Isis*, 1847, 486; *Ent. Zeit. Stett.* 1849, 203. *Boisd. Ind.* 180, 1424. *Herr.-Sch. Eur. Schm.* iii. 10, pl. 59, f. 362.

*Nemoria pulmentaria*, Guen. *Phal.* i. 349, 541.

South France. Dalmatia. Italy.

α. England? From Mr. Stephens' collection.

## 7. NEMORIA HERBARIA.

*Læte viridis; corpus album; alæ linea exterior obliqua marginæque albis; anticæ costa alba.*

*Geometra herbaria*, Hübn. *Geom.* f. 407. *Eversm. Faun. Volg.-Ural.* 372? *Herr.-Sch. Eur. Schm.* iii. 9, 4, pl. 59, f. 363.

*Nemoria herbaria*, Hübn. *Verz. Schm.* 285, 2783. *Guen. Phal.* i. 350, 543.

South France. Spain. South Russia.

## 8. NEMORIA ADVOLATA.

*Pallide viridis; alæ linea exterior obliqua alba roseo tincta, fimbria alba; anticæ linea interior obliqua alba roseo tincta.*

*Geometra advolata*, *Eversm. Bull. Soc. Imp. Nat. Mosc.* 1837, 1, 51; *Faun. Volg.-Ural.* 365. *Herr.-Sch. Eur. Schm. Sup.* 64, pl. 67, f. 414.

*Nemoria advolata*, Guen. *Phal.* i. 350, 544.

Saréppta.

## 9. NEMORIA? OLYMPIARIA.

*Pallide glauco-viridis; frons et pedes extus sordide carnei; tibiæ posticæ bicalcaratæ; alæ linea viridi-alba subundulata vix conspicua, fimbria albo varia.*

*Geometra Olympiaria*, *Herr.-Sch. Eur. Schm. Sup.* 63, f. 539.

*Nemoria?* *Olympiaria*, Guen. *Phal.* i. 350, 545.

Brussa.

## North America.

## 10. NEMORIA? PISTASCIARIA.

*Pistacio-viridis; frons ferruginea; alæ linea exteriori obscurior, fimbria rufescente; anticæ lineis duabus, 2a flexuosa, costa rufescente; anticæ lineis duabus, 2a flexuosa, costa rufescente; posticæ linea exteriori angulata.*

*Nemoria? pistasciaria, Guen. Phal. i. 348, 539.*

North America.

## 11. NEMORIA CHLOROLEUCARIA.

*Mas et fœm. Cyanescente-viridis; frons, palpi et tibiæ anticae intus rufo-ferruginea; alæ anticæ costa fimbria lineisque duabus latis parallelis bene determinatis flavo-albis; posticæ linea una recta obliqua subtremula.*

*Nemoria chloroleucaria, Guen. Phal. i. 351, 546.*

North America.

## 12. NEMORIA FASEOLARIA.

*Fœm. Late viridis; frons, palpi pedesque ex parte sordide rosei; alæ anticæ transverse strigatæ, linea recta indistincta, costa roseo notata, fimbria viridi apice alba; posticæ albæ, apud angulum interiorem viridi tinctæ.*

*Nemoria faseolaria, Guen. Phal. i. 351, 547.*

California.

## 13. NEMORIA TRANSLUCIDARIA.

*Viridis; alæ fascia alba; anticæ fascia valde dilatata lituram viridem includente, gutta subapicali alba.*

*Geometra translucidaria, Herr.-Sch. Exot. Schm. pl. 61, f. 343.*

Brazil.

## Hindostan.

## 14. NEMORIA FLAVIFRONTARIA.

*Mas. Subcinereo-viridis; frons ochracea; pedes albo et fuscis cincti; alæ linea exteriori recta obliqua, fimbria alba; anticæ trigonæ, acutæ, linea interiori, margine exteriori recto obliquo; posticæ angulo interiore producto.*



*Nemoria flavifrontaria*, *Guen. Phal. i. 346, 533.*

Hindustan.

#### 15. NEMORIA SOLIDARIA.

*Fœm. Obscure viridis; frons pallide fusca; tibiæ posticæ bicalcaratæ; alæ litura discali lineisque duabus saturatioribus parallelis tremulis approximatis; anticæ linea 3a interiore recta non tremula, margine exteriori subrecto; posticæ angulo interiore acuto.*

*Nemoria solidaria*, *Guen. Phal. i. 348, 548.*

Ceylon.

#### 16. NEMORIA CAUDULARIA.

*Flavescente-viridis; frons viridis; alæ linea alba subtremula; anticæ productæ, obtusæ, bilineatæ, linea communi recta; posticæ linea communi subarcuata.*

*Nemoria caudularia*, *Guen. Phal. i. 349, 541.*

North Hindostan.

#### 17. NEMORIA? DIRECTA.

*Mas. Albido-viridis; antennæ serratæ; pedes breviusculi, sat robusti; tibiæ posticæ calcaribus apicalibus brevissimis; alæ, lituris nullis; anticæ acutæ, costa margineque exteriori subrectis; posticæ abdomen non superantes, margine exteriori convexo.*

*Male.* Whitish green. Body whitish. Antennæ distinctly serrated. Legs rather short and stout; first pair of spurs much longer than the second. Wings without any markings. Fore wings acute; costa and exterior border almost straight, the latter moderately oblique. Hind wings not extending beyond the abdomen; exterior border convex; interior angle not prominent. Length of the body 3 lines; of the wings 8 lines.

Hindustan. In Mr. Saunders' collection.

## Australasia.

## 18. NEMORIA? DAMNATA.

**Fœm.** *Pallide cinereo-testacea, sat robusta; palpi minimi; antennæ subpectinatae; abdomen valde acutum, alas posticas paullo superans; tibiæ posticæ bicalcaratæ; alæ elongatæ, sat angustæ, linea exteriorè obscuriore subobsolete; anticæ acutæ, puncto discali nigro.*

*Female.* Pale cinereous-testaceous, rather stout. Proboscis short. Palpi very short and slender. Antennæ slightly pectinated nearly to the tips. Abdomen very acute, extending a little beyond the hind wings. Hind tibiæ with two long apical spurs. Wings elongate, rather narrow, without markings, with the exception of a slightly darker almost obsolete exterior line. Fore wings acute, with a minute blackish discal point; exterior border very oblique. Hind wings with the interior angle rather prominent. Length of the body 3 lines; of the wings 7 lines.

Sarawak, Borneo. In Mr. Saunders' collection.

## Australia.

## 19. NEMORIA GRATIOSATA.

**Mas.** *Late viridis; abdomen luteum; alæ anticæ costa fulvæ lineolata, lineis duabus, 2a obliqua bene determinata costam non attingente; posticæ luteæ, linea interiorè vix conspicua.*

• *Nemoria gratiosata, Guen. Phal. i. 351, 548, pl. 17, f. 1.*

Tasmania.

## Country unknown.

## 20. NEMORIA? DENTICULARIA.

**Fœm.** *Late viridis; caput albo fasciatum; palpi graciles, porrecti, rosei, articulo 3o elongato; alæ lineis duabus albidis denticulatis remotis; anticæ acutæ, costa alba recta, marginè exteriorè convexo.*

*Female.* Vivid green, whitish green beneath. Head with a white band. Palpi slender, porrect, rosy, extending far beyond the head; third joint much more than half the length of the second. Hind tibiæ with four short approximate spurs. Wings with the interior and exterior lines whitish, much denticulated, remote from

each other, the latter bent to the interior border in the hind wings ; fringe not differing from the wings in colour. Fore wings acute ; costa white, straight ; exterior border convex, moderately oblique. Length of the body  $3\frac{1}{2}$  lines ; of the wings 9 lines.

*a, b.* ———? From Mr. Milne's collection.

### Genus 5. TRIMETOPIA.

**Corpus robustum.** Frons bicolor, plana, trigona, apice incumbens. Proboscis nulla. Palpi brevissimi ; articulus 3us distinctus, filiformis, subulatus. Antennæ maris pectinatæ. Abdomen cylindricum, obtusum, subcarinatum. Pedes breves, graciles ; tibiæ posticæ breves, bicalcaratæ, non incrassatæ. Alæ tenues, integræ, rotundatæ.

*Trimetopia*, *Guen. Phal.* i. 352.

Body robust. Front flat, triangular, of two colours, with an incumbent point. Proboscis obsolete. Palpi rudimentary ; third joint distinct, filiform, subulate. Antennæ of the male pectinated. Abdomen cylindrical, obtuse, slightly keeled. Legs short, slender ; hind tibiæ short, not incrassated, with one pair of spurs. Wings delicate, entire, rounded.

#### 1. TRIMETOPIA ÆTHERARIA.

**Mas et fœm.?** *Cerulea ; frons albo marginata ; abdomen albo vittatum ; alæ venis albis ; anticæ lineis duabus albis obliquis rectis parallelis remotis ; posticæ linea exteriore arcuata.*

*Trimetopia ætheraria*, *Guen. Phal.* i. 352, 549, pl. 5, f. 9.

*Abyssinia.*

### Genus 6. IODIS.

**Corpus gracile.** Frons discolor. Proboscis distincta. Palpi recti, brevissimi, lineares, articulis sat distinctis. Autennæ maris pectinatæ, apice filiformes. Abdomen læve, concolor. Pedes robusti ; tibiæ posticæ quadricalcaratæ, maris incrassatæ ; tarsi spinosi. Alæ integræ, sericæ, tenues ; anticæ apice productæ ; posticæ flexæ aut angulatæ.

*Iodis*, *Hübner. Verz. Schm.* 285 ; *Guen. Phal.* i. 353.

*Iodis et Geometra*, *Lederer*.

*Geometra*, p., *Treit.* ; *Dup.* ; *Steph.* ; *Boisd.* ; *Herr.-Sch.*

Body slender. Proboscis distinct. Palpi straight, linear, very short and slender, not extending beyond the front ; joints moderately distinct. Antennæ of the male pectinated, filiform at the tips. Abdomen smooth, of one colour with the wings, without markings. Legs robust ; hind tibiae with two pairs of spurs, incrassated in the male ; tarsi spinose. Wings entire, silky, delicate. Fore wings elongated at the tips. Hind wings with the exterior border bent or angular.

## Europe.

### 1. IODIS VERNARIA.

*Pallide viridis ; caput rubrum ; pedes anteriores roseo-cervini ; alba linea exterior undulata alba, fimbria alba roseo notata ; antica linea interiore alba.*

*Phalæna-Geometra vernaria*, *Linn. Syst.* i. 2, 858, 195 ; *Faun. Suec.* 1225. *Gmel. ed. Syst. Nat.* i. 5, 2447, 195.

*Phalæna vernaria*, *Fabr. Sp. Ins.* 241, 3 ; *Mant. Ins.* ii. 184, 3 ; *Ent. Syst.* iii. 2, 129, 3. *Schr. Faun. Boic.* ii. 2, 3, 1607. *Müll. Zool. Dan. Prod.* 124, 1432.

*Geometra vernaria*, *Wien. Verz.* 97, 3. *Bork. Eur. Schm.* v. 8. *Penz. Faun.* 23. *Ill. N. Ausg. dess.* i. 367, 3. *Hübner. Geom.* pl. 2, f. 7. *Treit. Schm.* vi. 101, 1. *Dup. Lep.* iv. 248, pl. 152, f. 1. *Steph. Ill. Brit. Haust.* iii. 79. *Fisch.-Roel. Schm.* 131. *Boisd. Ind.* 180, 1422. *Herr.-Sch. Eur. Schm.* iii. 11, 13.

*Geometra æruginaria*, *Bork. Eur. Schm.* v. 43, 14.

*Geometra chrysopasaria*, *Esp. Schm.* v. 37, pl. 5, f. 1—4.

*Phalæna lucidata*, *Donov. Brit. Ins.* iii. pl. 97. *Haw. Lep. Brit.* 293.

*Iodis vernaria*, *Hübner. Verz. Schm.* 286, 2786. *Guen. Phal.* i. 354, 550.

a, b. Europe. From M. Becker's collection.

c, d. Ukraine. Presented by Dr. Dowler.

## 2. IODIS IMPARARIA.

**Mas.** *Flavescente-viridis; frons pedesque antici ex parte rufos-fulva; antenna flavæ; alæ anticæ linea una obliqua recta interrupta, margine exteriori subflexo; posticæ pallidissimæ lituris nullis, margine exteriori flexo antice subinciso.*

*Iodis impararia*, Guen. *Phal.* i. 354. 551.

Ural Region.

## 3. IODIS LACTEARIA.

*Albida; alæ lineis duabus albis cinereo marginatis; posticæ linea exteriori flexa.*

————— *Réaum. Ins.* ii. 386, pl. 29, f. 15—17. *Roës. Ins.* i. pl. 13, f. 1—4. *Geoff. Ins. Par.* ii. 131, 44.

*Phalæna-Geometra lactearia*, Linn. *Syst. Nat.* i. 2, 194; *Faun. Suec.* 1226. *Clerck, Icon.* pl. 3, f. 12. *Scop. Ent. Carn.* 529. *Gmel. ed. Syst. Nat.* i. 5, 2447, 194.

*Geometra lactearia*, Wien. *Verz.* 98, 9. *Esp. Schm.* v. pl. 1, f. 1—4.

*Geometra æruginaria*, Wien. *Verz.* 314, 10? *Ill. N. Ausg. dess.* i. 372, 8, 9. *Hübner. Geom.* pl. 9, f. 46. *Treit. Schm.* vi. 109, 4. *Sepp. Schm.* vii. pl. 11. *Herr.-Sch. Eur. Schm.* iii. 11, 12. *Frey. Beitr.* pl. 30, f. 2.

*Geometra putataria*, Bork. *Eur. Schm.* v. 44, 15. *Esp. Schm.* v. 25, pl. 2, f. 4—6. *Haw. Lep. Brit.* 300. *Steph. Ill. Brit. Haust.* iii. 317. *Dup. Lep.* iv. 242, pl. 151, f. 3.

*Geometra micantaria*, *Esp. Schm.* v. pl. 2, f. 78.

*Phalæna volutata?* *Fabr. Ent. Syst.* iii. 187, 211.

*Iodis vernaria*, *Hübner. Verz. Schm.* 286, 278. *Guen. Phal.* i. 355, 555.

a—d. Europe. From M. Becker's collection.

## 4. IODIS PUTATARIA.

**I.** *lacteariæ simillima; antennæ maris minus pectinatæ; alæ lineis dentatis.*

————— *Deg. Ins.* ii. 362, pl. 6, f. 8.

*Phalæna-Geometra putataria*, Linn. *Syst. Nat.* i. 2, 859, 196; *Faun. Suec.* 1225. *Clerck, Icon.* pl. 3, f. 9. *Gmel. ed. Syst. Nat.* i. 5, 2448, 196.

*Phalæna putataria*, *Fabr. Sp. Ins.* ii. 242, 5; *Mant. Ins.* ii. 185, 6; *Ent. Syst.* iii. 2, 131, 8.

*Var.?* *Female*. Glaucous-green, paler beneath. Head white between the antennæ, fawn-colour in front. Palpi fawn-colour, white beneath; third joint rather shorter than the second. Hind tibiæ with four long spurs. Wings ample, with very numerous transverse indistinct whitish streaks; interior and exterior lines whitish, indistinct, dentate, the former almost obsolete. Length of the body 5—6 lines; of the wings 14—16 lines.

Colombo.

a—c. Ceylon. From M. Nietner's collection.

### 8. THALASSODES SISUNAGA.

*Fœm. Viridis, capite testaceo antice rubro; palpi brevissimi, articulo 3o minimo; tibiæ posticæ calcaribus duobus parvis apicalibus; alæ amplæ, macula parva discali nigra, linea exteriori tenui dentata undulata pallide lutea intus diffusa extus albido submarginata, linea marginali ferruginea, fimbria cinerea; anticæ subfalcatæ, subdentatæ, linea interiore, costa pallide lutea; posticæ dentatæ, margine interiore luteo.*

*Female*. Green. Head testaceous, deep red in front. Palpi very short, not extending so far as the head; third joint extremely minute. Hind tibiæ with two short apical spurs. Wings ample, with a small black discal spot and with a slight dentate undulating pale luteous exterior line, which is indistinctly whitish-bordered on the outer side, and is diffuse on the inner side; marginal line ferruginous; fringe cinereous. Fore wings subfalcate, subdentate, with an interior line; costa pale luteous. Hind wings more dentate, luteous along the interior border, extending much beyond the hind wings. Length of the body 6 lines; of the wings 16 lines.

a. Hindostan. From Archdeacon Clerk's collection.

### 9. THALASSODES DISSEPTA.

*Mas. Viridescens-testacea; caput antice cervinum; palpi angulati, caput paullo superantes, articulo 3o longiusculo; antennæ pectinatæ; abdomen apice acutum; alæ linea indistincta obliqua alba recta apud alas posticas arcuata; anticæ acutæ; posticæ margine exteriori angulato.*

*Male*. Greenish testaceous, whitish beneath. Head fawn-colour in front. Palpi angular, extending a little beyond the head;

third joint much more slender than the second, and less than half its length. Antennæ pectinated. Abdomen with an acute apical tuft. Wings ample, with an indistinct oblique white line, which is straight in the fore wings and curved in the hind wings. Fore wings acute; costa straight, except towards the tip; exterior border hardly convex, rather oblique. Hind wings with a distinct angle in the middle of the exterior border. Length of the body 6 lines; of the wings 16 lines.

a. Hindostan. From the Entomological Society's collection.

#### 10. THALASSODES DISSIMULATA.

**Mas.** *Pallide glauco-viridis, subtus alba nitens; palpi porrecti, caput paullo superantes, articulo 3o minimo; antennæ pectinatæ, triente apicali filiformi; tibiæ posticæ incrassatæ, calcaribus quatuor parvis; alæ striga discali lineaque exteriori saturatioribus, hac subundulata subdentata albido marginata; anticæ subfalcatæ, linea interiore saturatiore; posticæ acute angulatæ.*

**Male.** Pale sea-green, white and shining beneath. Palpi porrect, extending a little beyond the head; third joint very minute, not more than one-sixth of the length of the second. Antennæ pectinated to two-thirds of the length. Hind tibiæ slightly incrassated, with four short spurs. Wings ample; discal streak and exterior line deeper green; the latter whitish-bordered, minutely undulating and dentate. Fore wings subfalcate, with an interior line; costa straight, except towards the tip; exterior border straight, rather oblique. Hind wings extending much beyond the abdomen, with an acute angle in the middle of the exterior border. Length of the body 6 lines; of the wings 16 lines.

This species closely resembles *T. undifera*.

a. Hindostan. From Archdeacon Clerk's collection.

#### Ceylon.

Of the following seven species, the four last should, perhaps, be removed from this genus.

*Geometra putataria*, *Wien. Verz.* 98, 8. *Ill. N. Ausg. dess.* i. 370, 8. *Hübner. Geom.* pl. 2, f. 10. *Treit. Schm.* vi. 112, 5. *Herr. Sch. Eur. Schm.* iii. 11, 11.

*Iodis putataria*, *Hübner. Verz. Schm.* 286, 2788. *Guen. Phal.* i. 357, 556.

*a, b.* Europe. From M. Becker's collection.

## North America.

### 5. IODIS EUCHLORARIA.

*Pallide pomacea; alæ fimbria subroseo-alba; anticae linea alba recta obliqua abbreviata vix conspicua, margine exteriori subflexo; posticae margine exteriori angulato.*

*Iodis euchloraria*, *Guen. Phal.* i. 355, 553.

North America.

### 6. IODIS TRACTARIA.

*Mas et foem. Pallide viridis; caput album, roseo fasciatum; palpi porrecti, articulo 3o minimo; antennæ maris subpectinatae; abdomen album; tibiæ posticae calcaribus quatuor breviusculis; alæ semihyalinae, lineis duabus obliquis albis, la arcuata indistincta, 2a apud alas posticas flexa, anticae acuta, costa albida subconvexa; posticae margine exteriori subflexo.*

*Male and female.* Pale green. Head and abdomen white, the former with a rosy band. Palpi porrect, extending very little beyond the head; third joint very minute, not more than one-sixth of the length of the second. Antennæ of the male very slightly pectinated. Hind tibiæ with four rather short spurs. Wings ample, semihyaline, with two oblique white lines; interior line curved, much less distinct than the exterior line, which is straight in the fore wings, bent to the interior border in the hind wings. Fore wings acute; costa whitish, slightly convex; exterior border rather oblique, hardly convex. Hind wings extending beyond the abdomen; exterior border very slightly bent. Length of the body 4 lines; of the wings 12 lines.

*a—d.* Trenton Falls, New York. Presented by E. Doubleday, Esq.

*e.* Orilla, West Canada. From Mr. Bush's collection.

*f, g.* Nova Scotia. From Lieut. Redman's collection.



## West Indies.

## 7. IODIS DECOLORARIA.

**Mas.** *Pallide glauco-viridis ; caput rufescens, vertice albo ; palpi porrecti, graciles, articulo 3o lanceolato ; antennæ pectinatae ; abdomen album, cristis rubris aureo signatis ; tibiæ posticæ bicalcaratæ ; alæ semihyalinæ, fimbria albida ; anticæ acutæ, costæ albida.*

**Male.** Pale glaucous-green. Head reddish ; vertex white. Palpi porrect, slender, extending beyond the head ; third joint lanceolate. Antennæ moderately pectinated. Abdomen white, with dark red gold-bespangled crests. Legs slender ; hind tibiæ with long apical spurs. Wings semihyaline, without markings ; fringe whitish. Fore wings acute ; costa whitish ; exterior border hardly convex, moderately oblique. Hind wings extending beyond the abdomen ; interior angle prominent. Length of the body  $3\frac{1}{2}$  lines ; of the wings 10 lines.

**α.** Jamaica. From Mr. Gosse's collection.

## 8. IODIS INDECLARARIA.

**Mas.** *Pallide viridescens-flava ; vertex albus ; palpi albido-rosei, caput superantes, articulo 3o brevissimo ; antennæ late pectinatae, apice simplices ; alæ linea marginali rufescente-fusca interrupta, fimbria alba nitente ; anticæ acutæ, puncto discali fusco, costæ alba.*

**Male.** Pale greenish yellow, whitish beneath. Vertex white. Palpi whitish rosy, extending beyond the head ; third joint hardly one-fourth of the length of the second. Antennæ broadly pectinated, except towards the tips. Hind tibiæ with four long spurs. Wings ample, with a reddish brown marginal line, which is interrupted opposite the veins ; fringe white, shining. Fore wings acute, with a brown discal point ; costa white ; exterior border hardly convex, slightly oblique. Hind wings extending much beyond the abdomen ; interior angle prominent. Length of the body  $2\frac{1}{2}$  lines ; of the wings 7 lines.

**α.** St. Domingo. From Mr. Hearse's collection.

## South America.

## 9. IODIS PRODUCTARIA.

*Alba* ; *alæ subdentatæ* ; *anticæ subfalcatæ*, *fasciis duabus viridibus albo interlineatis*, *1a basali latissima*, *costa flavescente lunulis marginalibus nigris* ; *posticæ dilatatæ, angulatæ*, *marginē exteriorē antico viridi*.

*Thalera productaria*, *Herr.-Sch. Schm. Exot. pl. 61, f. 342.*

*Iodis productaria*, *Guen. Phal. i. 357, 557.*

Brazil?

## 10. IODIS PHYLIRA.

*Glaucoviridis* ; *alæ macula discali rotunda rufa* ; *anticæ acutæ*, *costa lutea* ; *posticæ marginē exteriorē angulato*.

*Phalæna Phylira*, *Cram. Pap. Exot. ii. 113, pl. 170, f. D.*

*Phalæna Phylirata*, *Fabr. Sp. Ins. ii. 254, 72* ; *Mant. Ins. ii. 197, 111* ; *Ent. Syst. iii. 2, 137.* *Gmel. ed. Syst. Nat. i. 5, 2453, 626.*

*Iodis Phylirata*, *Guen. Phal. i. 358, 560.*

Surinam.

## South Africa.

## 11. IODIS DIDITA.

*Mas. Læte viridis* ; *caput cervinum, vertice albo* ; *palpi graciles, ascendentes, articulo 3o minimo* ; *antennæ late pectinatæ, apices versus filiformes* ; *abdomen apice attenuatum* ; *alæ puncto discali nigro* ; *anticæ acutæ, costa alba* ; *posticæ abdomen paullo superantes.*

*Male.* Bright green, paler beneath. Head fawn-colour; vertex white. Palpi slender, ascending, not rising higher than the vertex; third joint very minute. Antennæ broadly pectinated, except towards the tips. Abdomen attenuated at the tip. Legs slender; hind tibiæ with four long spurs. Wings with a black discal point; fringe of the ground hue. Fore wings acute; costa and exterior border nearly straight, the former white, the latter rather oblique. Hind wings extending a little beyond the abdomen. Length of the body 4 lines; of the wings 10 lines.

*a, b.* South Africa. Presented by R. Trimen, Esq.

## 12. IODIS DIVINCTA.

**Mas.** *Late viridis ; caput ferrugineum, vertice albo ; palpi porrecti, caput non superantes, articulo 3o minimo ; antennæ subcrenulatæ, subciliatæ ; pedes anteriores rosei ; alæ fimbria apice rosea ; anticæ apice rotundatæ, costa rosea ; posticæ viridescens-albæ. Var.—Alæ fimbria omnino viridi ; anticæ costa albæ.*

**Male.** Vivid pale green, paler beneath. Head deep ferruginous ; vertex white. Palpi porrect, not extending beyond the head ; third joint very minute. Antennæ minutely crenulated and ciliated. Anterior legs mostly rosy. Hind tibiæ with four short spurs. Wings with the fringe of the ground hue, rosy towards the tip. Fore wings rounded at the tips ; costa rosy, straight ; exterior border very oblique. Hind wings greenish white, extending a little beyond the abdomen. *Var.*—Fringe wholly green. Fore wings with a white costa. Length of the body 4 lines ; of the wings 10 lines.

**a, b.** South Africa. Presented by R. Trimen, Esq.

## Hindustan.

## 13. IODIS OPALARIA.

**Mas.** *Alba ; frons cervina ; palpi pedesque antici intus rufescentes ; alæ opalinæ semihyalinæ viridescens-cinereo strigatæ, lineis duabus viridescens-cinereis indeterminatis parallelis sat approximatis ; anticæ productæ, obtusæ, costa subtus roseo-fusca, margine anteriore recto.*

*Iodis opalaria, Guen. Phal. i. 357, 558.*

Hindustan ?

## 14. IODIS THETYDARIA.

**Mas et fœm.** *Alba, magna ; frons olivaceo-fusca ; alæ opalinæ, viridescens strigatæ, fasciis duabus latis margineque anteriore olivaceis, fascia 1a brevi ; anticæ acutæ ; posticæ angulo anteriore acuto subcaudiformi.*

*Iotis Thetydaria, Guen. Phal. i. 358, 559.*

Hindustan.

## 15. IODIS DISCESSA.

**Fœm.** *Testaceo-viridis, subtus albida nitens; caput antice cernuum; palpi graciles, oblique ascendentes, articulo 3o longi lineari; tibiæ posticæ calcaribus quatuor parvis; alæ lineæ exteriori obliqua subundulata subdentata valde indistincta, lineæ interiori fere obsoleta; anticæ vix acutæ.*

**Female.** Testaceous-green, whitish and shining beneath. Head fawn-colour in front. Palpi slender, obliquely ascending, rising a little higher than the vertex; third joint linear, more than half the length of the second. Hind tibiæ with four short spurs. Wings with an exterior very indistinct oblique slightly undulating and dentate line, and with a hardly visible similar interior line. Fore wings hardly acute; costa straight; exterior border hardly convex. Hind wings with a convex exterior border. Length of the body  $3\frac{1}{2}$  lines; of the wings 9 lines.

a. North Hindostan. From Mr. Stevens' collection.

## 16. IODIS LESARIA.

**Fœm.** *Pallidissime viridis; palpi graciles, subangulati, articulo 3o brevissimo; tibiæ posticæ subdilatatae, quadricaratae; alæ semihyalinae, tenuissimæ, macula discali lineaque exteriori tenui exteriori ochraceis; anticæ acutæ.*

**Female.** Very pale green. Palpi slender, slightly angular, extending a little beyond the head; third joint not more than one-fourth of the length of the second. Hind tibiæ slightly dilated, with four moderately long spurs. Wings semihyaline, very delicate, with an ochraceous spot in the disk, and with an exterior slight curved ochraceous line; marginal points ochraceous. Fore wings acute; costa and exterior border hardly convex. Hind wings extending rather beyond the abdomen. Length of the body  $2\frac{1}{2}$  lines; of the wings  $5\frac{1}{2}$  lines.

a. Ceylon. Presented by Dr. Templeton.

## 17. IODIS? VIVILACA.

**Mas et fœm.** *Pallide flavescente-viridis, subtus albida; tibiæ posticæ quadricaratae; alæ amplæ, puncto discali fusco, fimbria albida; anticæ acutæ, costa recta, margine exteriori*

obsolete towards the costa; fringe a little paler than the ground hue; costa hardly convex; exterior border very oblique. Hind wings greenish white, extending beyond the abdomen. Length of the body 5 lines; of the wings, 14 lines.

*a, b.* Tasmania. Presented by M. Allport, Esq.

## Genus 7. THALASSODES.

Corpus gracile. Abdomen læve, alas posticas non superans, apice compressum acutum. Pedes tenues; tibiæ posticæ quadricaratae, non incrassatae. Alæ amplæ, tenues, semihyalinæ, palide virides. *Mas.*—Palpi recti, sinuati, frontem paullo superantes; articulus 3us distinctus, brevisculus. Antennæ longæ, late pectinatae, triente apicali filiformi. *Fœm.*—Palpi valde longiores, fere glabri; articulus 3us elongatus. Antennæ filiformes.

*Thalassodes*, Guen. *Phal.* i. 359.

Body slender. Abdomen smooth, hardly extending to the interior angle of the hind wings, compressed and acute at the tip. Legs slender; hind tibiæ not incrassated, with two pairs of spurs. Wings ample, delicate, semihyaline, pale green, speckled with paler green or with white. *Male.*—Palpi straight, extending a little beyond the front; third joint distinct, but rather short. Antennæ long, broadly pectinated to two-thirds of the length; branches slender, incumbent. *Female.*—Palpi much longer than those of the male, almost bare; third joint filiform, often incumbent. Antennæ filiform.

## South Africa.

### 1. THALASSODES VERMICULARIA.

*Mas et fœm.* Subcinerascens glauco-viridis; frons viridis, antice ferruginea; palpi apice pedesque antici intus obscure rufi; alæ albo confertim strigatæ; posticæ margine exteriori subdentato, angulo interiore vix ullo.

*Thalassodes vermicularia*, Guen. *Phal.* i. 359, 561.

Namaqua Region.

## 2. THALASSODES SIMIARIA.

Mas. *T. vermiculariæ affinis*; *frons palpique apice pallide fuscis*; *alæ strigis paucioribus brevioribus*; *antica costa ochraceo-flavo lineata*; *posticæ angulo interiore magis producto*.

*Thalassodes simiaria*, Guen. *Phal.* i. 359, 562.

Senegal.

## 3. THALASSODES GERMINARIA.

Mas et fœm. *T. vermiculariæ similis, major*; *alæ minus strigatæ, puncto discali nigro magis conspicuo*; *posticæ angulo interiore paullo longiore*.

*Thalassodes germinaria*, Guen. *Phal.* i. 360, 563.

Abyssinia.

## 4. THALASSODES HYRARIA.

Fœm. *T. quadrariæ simillima*; *frons viridis*; *palporum articulus 3us longior, albus*.

*Thalassodes hyraria*, Guen. *Phal.* i. 360, 565.

Isle Bourbon.

## 5. THALASSODES DILUCIDA.

Fœm. *Alba*; *caput pallide cervinum, vertice albo*; *palpi longi, graciles, oblique ascendentes, articulo 3o elongato*; *alæ pallidissime virides, iridescentes, semihyalinæ, strigis transversis indistinctis plurimis albidis*; *antica acutæ*. Mas? — *Palpi porrecti, brevissimi, articulo 3o minimo*; *antennæ pectinatæ, apice filiformes*; *alæ fere opacæ, strigis transversis vix conspicuis*.

*Female.* White. Head pale fawn-colour; vertex white. Palpi long, slender, obliquely ascending; third joint much shorter than the second. Wings very pale green, iridescent, semihyaline, with transverse indistinct very numerous and minute whitish streaks. Fore wings acute; costa and exterior border slightly convex, the latter moderately oblique. Hind wings extending much beyond the abdomen; exterior border convex. Length of the body 4—5 lines; of the wings 12—14 lines.

obsolete towards the costa; fringe a little paler than the ground hue; costa hardly convex; exterior border very oblique. Hind wings greenish white, extending beyond the abdomen. Length of the body 5 lines; of the wings, 14 lines.

*a, b.* Tasmania. Presented by M. Allport, Esq.

## Genus 7. THALASSODES.

Corpus gracile. Abdomen læve, alas posticas non superans, apice compressum acutum. Pedes tenues; tibiæ posticæ quadricaratae, non incrassatae. Alæ amplæ, tenues, semihyalinæ, palide virides. *Mas.*—Palpi recti, sinuati, frontem paullo superantes; articulus 3us distinctus, breviusculus. Antennæ longæ, late pectinatae, triente apicali filiformi. *Fœm.*—Palpi valde longiores, fere glabri; articulus 3us elongatus. Antennæ filiformes.

*Thalassodes*, *Guen. Phal. i. 359.*

Body slender. Abdomen smooth, hardly extending to the interior angle of the hind wings, compressed and acute at the tip. Legs slender; hind tibiæ not incrassated, with two pairs of spurs. Wings ample, delicate, semihyaline, pale green, speckled with paler green or with white. *Male.*—Palpi straight, extending a little beyond the front; third joint distinct, but rather short. Antennæ long, broadly pectinated to two-thirds of the length; branches slender, incumbent. *Female.*—Palpi much longer than those of the male, almost bare; third joint filiform, often incumbent. Antennæ filiform.

## South Africa.

### 1. THALASSODES VERMICULARIA.

*Mas et fœm. Subcinerascens glauco-viridis; frons viridis, antice ferruginea; palpi apice pedesque antici intus obscure rufi; alæ albo confertim strigatae; posticæ margine exteriori subdentato, angulo interiore vix ullo.*

*Thalassodes vermicularia*, *Guen. Phal. i. 359, 561.*

Namaqua Region.

*Var.?* *Female*. Glaucous-green, paler beneath. Head white between the antennæ, fawn-colour in front. Palpi fawn-colour, white beneath; third joint rather shorter than the second. Hind tibiæ with four long spurs. Wings ample, with very numerous transverse indistinct whitish streaks; interior and exterior lines whitish, indistinct, dentate, the former almost obsolete. Length of the body 5—6 lines; of the wings 14—16 lines.

Colombo.

a—c. Ceylon. From M. Nietner's collection.

### 8. THALASSODES SISUNAGA.

*Fœm. Viridis, capite testaceo antice rubro; palpi brevissimi, articulo 3o minimo; tibiæ posticæ calcaribus duobus parvis apicalibus; alæ amplæ, macula parva discali nigra, linea exteriori tenui dentata undulata pallide lutea intus diffusæ extus albido submarginata, linea marginali ferruginea, fimbria cinerea; anticæ subfalcatæ, subdentatæ, linea interiore, costa pallide lutea; posticæ dentatæ, margine interiore luteo.*

*Female*. Green. Head testaceous, deep red in front. Palpi very short, not extending so far as the head; third joint extremely minute. Hind tibiæ with two short apical spurs. Wings ample, with a small black discal spot and with a slight dentate undulating pale luteous exterior line, which is indistinctly whitish-bordered on the outer side, and is diffuse on the inner side; marginal line ferruginous; fringe cinereous. Fore wings subfalcate, subdentate, with an interior line; costa pale luteous. Hind wings more dentate, luteous along the interior border, extending much beyond the hind wings. Length of the body 6 lines; of the wings 16 lines.

a. Hindostan. From Archdeacon Clerk's collection.

### 9. THALASSODES DISSEPTA.

*Mas. Viridescens-testacea; caput antice cervinum; palpi angulati, caput paullo superantes, articulo 3o longiusculo; antennæ pectinatæ; abdomen apice acutum; alæ linea indistincta obliqua alba recta apud alas posticas arcuata; anticæ acutæ; posticæ margine exteriori angulato.*

*Male*. Greenish testaceous, whitish beneath. Head fawn-colour in front. Palpi angular, extending a little beyond the head;



third joint much more slender than the second, and less than half its length. Antennæ pectinated. Abdomen with an acute apical tuft. Wings ample, with an indistinct oblique white line, which is straight in the fore wings and curved in the hind wings. Fore wings acute; costa straight, except towards the tip; exterior border hardly convex, rather oblique. Hind wings with a distinct angle in the middle of the exterior border. Length of the body 6 lines; of the wings 16 lines.

a. Hindostan. From the Entomological Society's collection.

#### 10. THALASSODES DISSIMULATA.

**Mas.** *Pallide glauco-viridis, subtus alba nitens; palpi porrecti, caput paullo superantes, articulo 3o minimo; antennæ pectinatæ, triente apicali filiformi; tibiæ posticæ incrassatæ, calcaribus quatuor parvis; alæ striga discali lineaque exteriori saturatioribus, hac subundulata subdentata albido marginata; anticæ subfalcatæ, lineæ interiori saturatiore; posticæ acute angulatæ.*

**Male.** Pale sea-green, white and shining beneath. Palpi porrect, extending a little beyond the head; third joint very minute, not more than one-sixth of the length of the second. Antennæ pectinated to two-thirds of the length. Hind tibiæ slightly incrassated, with four short spurs. Wings ample; discal streak and exterior line deeper green; the latter whitish-bordered, minutely undulating and dentate. Fore wings subfalcate, with an interior line; costa straight, except towards the tip; exterior border straight, rather oblique. Hind wings extending much beyond the abdomen, with an acute angle in the middle of the exterior border. Length of the body 6 lines; of the wings 16 lines.

This species closely resembles *T. undifera*.

a. Hindostan. From Archdeacon Clerk's collection.

#### Ceylon.

Of the following seven species, the four last should, perhaps, be removed from this genus.

## 11. THALASSODES CŒLATARIA.

**Mas.** *Viridis ; caput cervinum, vertice albo ; palpi caput superantes, articulo 3o brevissimo ; antennæ late pectinatæ, apice filiformes ; abdomen testaceum, lateribus subfasciculatis ; tibiæ posticæ quadricalcaratæ ; alæ amplæ, dentatæ, spatio apud marginem anteriorem posticum testaceo fusco-strigato ; antica subfalcata, costa testacea fusco conspersa ; posticæ subcaudatæ.*

**Male.** Green. Head fawn-colour in front ; vertex white. Palpi extending beyond the head ; third joint not more than one-fourth of the length of the second. Antennæ broadly pectinated to three-fourths of the length. Abdomen testaceous, with slight tufts along each side. Hind tibiæ with the first pair of spurs much longer than the second. Wings ample, dentate, with a testaceous brown-streaked space along the hind part of the exterior border. Fore wings subfalcate ; costa irregularly testaceous, brown-speckled. Hind wings subcaudate, extending much beyond the abdomen. Length of the body 6 lines ; of the wings 16 lines.

**a. Ceylon.** Presented by Dr. Templeton.

## 12. THALASSODES NANDA.

**Mas.** *Pallide testaceo-viridis, subtus alba nitens ; caput albo fasciatum ; palpi oblique ascendentes, articulo 3o minimo ; antennæ subpectinatæ, dimidio apicali filiformi ; tibiæ posticæ subdilatatæ, calcaribus quatuor longis ; alæ amplæ, lineis duabus albis denticulatis marginatis subparallelis ; antica acutæ ; posticæ margine anteriore angulato.*

**Male.** Pale testaceous-green, white and shining beneath. Head with a transverse white line between the antennæ. Palpi obliquely ascending, not rising higher than the vertex ; third joint very minute, not more than one-fourth of the length of the second. Antennæ slightly pectinated to almost half the length. Hind tibiæ slightly incrassated, with four long spurs. Wings ample, with two white denticulated lines, which are nearly parallel to the exterior border, and are bordered with slightly deeper green than the ground hue. Fore wings acute ; costa and exterior border hardly convex. Hind wings extending beyond the abdomen ; exterior border distinctly angular. Length of the body  $3\frac{1}{2}$  lines ; of the wings 8 lines.

**a. Ceylon.** Presented by Dr. Templeton.

## 13. THALASSODES DISERTA.

**Fœm.** *Pallide viridescens-testacea, subtus albida; pedes breviusculi; tibiæ posticæ calcaribus duobus apicalibus parvis; alæ linea marginali rosea, fimbria alba nitente cinereo interlineata; anticæ valde acutæ, margine exteriori perobliquo; posticæ margine exteriori angulato.*

**Female.** Pale greenish testaceous, whitish beneath, probably more green in the recent state. Head wanting. Legs rather short; hind tibiæ with two short apical spurs. Wings without markings, except a rosy red marginal line; fringe whitish, shining, interlined with cinereous. Fore wings very acute; costa and exterior border almost straight, the latter very oblique. Hind wings extending a little beyond the abdomen; exterior border distinctly angular. Length of the body 3 lines; of the wings 8 lines.

**a. Ceylon.** Presented by Dr. Templeton.

## 14. THALASSODES IMMISSARIA.

**Mas.** *Pallide viridescens, lutescente tincta; antennæ pectinatæ, apices versus simplices; alæ strigis transversis albidis subobsoletis, punctis marginalibus nigris; fimbria basi albida; posticæ margine exteriori angulato.*

**Male.** Pale dull green, suffused with pale luteous. Antennæ slightly pectinated to beyond half the length. Wings with almost obsolete transverse whitish streaks, and with minute black marginal points; fringe whitish at the base; the angles well defined. Hind wings with an obtuse angle behind the middle of the exterior border. Length of the body 7 lines; of the wings 16 lines.

**Ceylon.** In Mr. Layard's collection.

## 15. THALASSODES SIMPLICIARIA.

*Pallidissime flavescens-viridis; alæ linea marginali rosea; anticæ acutæ, margine exteriori perobliquo; posticæ margine exteriori angulato.*

Very pale yellowish green. Wings with a rosy red marginal line. Fore wings with acute tips; exterior border very oblique. Hind wings with the exterior border angular in the middle. Length of the body 3 lines; of the wings 7 lines.

**Ceylon.** In Mr. Layard's collection.

## 16. THALASSODES ALBANNULARIA.

**Mas.** *Flava; palpi oblique ascendentes, articulo 3o minimo; antennæ late pectinatæ, apice simplices; alæ fuscescente conspersæ, annulo discali albo fusco-marginato; antica acuta.*

**Male.** Yellow. Palpi short, obliquely ascending; third joint very minute. Antennæ broadly pectinated nearly to the tips. Wings moderately broad, minutely speckled with pale brown; a small white brown-bordered ringlet on each disk. Fore wings acute; costa very slightly convex; exterior border moderately oblique. Length of the body 5 lines; of the wings 12 lines.

Ceylon. In Mr. Layard's collection.

## 17. THALASSODES CHLOROZONARIA.

**Mas.** *T. albannulariæ affinis, rufescente-cervina, subtus rufescens; thorax et abdomen basi viridescencia; alæ fascia lata obliqua viridescente rufescente-marginata; antica subacuta, gutta costali subapicali nigricante, fascia antice extus dilatata costam versus abrupte retracta annulum albidum rufescentem marginatum includente.*

**Male.** Reddish fawn-colour, reddish beneath. Palpi and antennæ as in *T. albannularia*. Thorax and fore part of the abdomen greenish. Wings moderately broad; an oblique greenish broad reddish-bordered band. Fore wings slightly acute; a blackish dot near the tip of the costa; the band dilated exteriorly in front, abruptly retracted towards the costa, including a whitish reddish-bordered ringlet; costa hardly convex; exterior border moderately oblique. Length of the body 5 lines; of the wings 13 lines.

Ceylon. In Mr. Layard's collection.

## Australasia.

## 18. THALASSODES MARINARIA.

**Fœm.** *Pallide cinereo-viridis; abdomen album, basi viride; alæ strigis plurimis pallidis, lineola marginali nigra, fimbria roseo-alba; antica costa flavesciente-albo notata; postica margine exteriori angulato.*

*Thalassodes marinaria*, Guen. *Phal.* i. 361, 568.

Borneo.

## 19. THALASSODES DEPULSATA.

**Mas et fœm.** *Glauco-viridis; caput fuscum, vertice albo; palpi subangulati, caput superantes, articulo 3o fœm. elongato; antennæ maris triente apicali simplici; tibiæ posticæ maris apice productæ et lanceolatæ; alæ semihyalinæ, lituris plurimis transversis albidis, linea exteriori albida subdentata subundulata, punctis marginalibus nigris elongatis, fimbria pallide lutea; anticæ acutæ, costa lutea; posticæ margine exteriori angulato. Fœm.—Alæ puncto discali albo.*

*Male and female.* Sea green, paler beneath. Head brown; vertex white. Palpi porrect, very slightly angular, extending beyond the head; third joint longer in the female than in the male. Antennæ of the male pectinated to much beyond half the length. Hind tibiæ with four short spurs, incrassated, and ending in a lanceolate protuberance in the male. Wings ample, semihyaline, with numerous small irregular transverse whitish marks, and with an exterior slightly dentate and undulating whitish line, which is bent to the interior border in the hind wings; a white discal point, obsolete in the male; marginal points black, elongated; fringe pale luteous. Fore wings acute; costa and exterior border straight, the former luteous, the latter rather oblique. Hind wings with the exterior border distinctly angular in the middle. Length of the body 7 lines; of the wings 16–18 lines.

*a, b.* Menado, Celebes. From Madame Ida Pfeiffer's collection.

## Australia.

## 20. THALASSODES VERARIA.

**Mas.** *T. quadrariæ simillima, major; frons viridis; antennæ magis plumosæ; alæ magis flavescens; anticæ non falcata; posticæ minus oblongæ.*

*Thalassodes veraria, Guen. Phal. i. 360, 566.*

Australia?

## 21. THALASSODES INSUPERATA.

**Mas.** *Læte viridis, subtus alba; caput albo fasciatum; palpi porrecti, articulo 3o longiusculo; antennæ subpectinata, triente apicali simplici; abdomen album, viridi fasciatum; alæ lituris transversis indistinctis lineaque exteriori subangulata*

*strigas emittente albas semihyalinas, fimbria viridi-alba; antica acutæ, costa alba fusco conspersa; posticæ marginæ exteriori subangulato.*

**Male.** Vivid green, white beneath. Head bordered with white, and having a white band between the antennæ. Palpi porrect, extending rather far beyond the head; third joint about half the length of the second. Antennæ slightly pectinated for two-thirds of the length. Abdomen white, with a green band on each segment. Hind tibiæ with four long spurs. Wings ample, with transverse white semihyaline marks, which are mostly on the hind wings, and with a more distinct exterior white slightly angular line, which emits short streaks outward; fringe white, mingled with green. Fore wings acute; costa and exterior border slightly convex; the former white, speckled with brown. Hind wings extending beyond the abdomen; exterior border slightly angular. Length of the body 5 lines; of the wings 14 lines.

a. Moreton Bay. From Mr. Diggles' collection.

## 22. THALASSODES PILARIA.

**Mas.** *T. quadrariæ simillima; frons cervina; antennæ longiora, ramis valde ciliatis; tibiæ posticæ albo pilosæ; alæ antice non falcatae, angulo interiore quadrato; posticæ magis oblongæ, linea undata.*

*Thalassodes pilaria, Guen. Phal. i. 361, 567, pl. 15, f. 2.*

Society Islands.

Country unknown.

## 23. THALASSODES INCONCLUSARIA.

**Fœm.** *Pallide glauco-viridis; caput rufescens, vertice albo; palpi porrecti, subangutati, articulo 3o elongato; alæ lituris plurimis indistinctis transversis albidis, linea exteriori alba obliqua subrecta postice flexa; antica acutæ; posticæ marginæ exteriori subangulato.*

**Female.** Pale sea-green. Head reddish, vertex white. Palpi porrect, slightly angular, extending somewhat beyond the head; third joint linear, much shorter than the second. Hind tibiæ with four moderately long spurs. Wings ample, with numerous small transverse indistinct whitish marks, and with a white exterior oblique nearly straight line, which is bent to the interior border in

the hind wings. Fore wings acute; costa and exterior border straight. Hind wings extending much beyond the abdomen; exterior border slightly angular in the middle. Length of the body 5 lines; of the wings 14 lines. ●

It has much resemblance to *T. dissepia*, and may be the female of that species.

a. ———? From Mr. Milne's collection.

### Genus 8. DYSPTERIS.

Corpus gracile. Proboscis tenuis. Pedes graciles; tibiæ posticæ calcaribus quatuor longis. Alæ inæquales, fimbria brevi; anticæ amplæ, trigonæ, apice acutæ, margine interiore brevi; posticæ minimæ, oblongæ, plica interiore. *Mas.*—Palpi graciles, subsinuati, frontem superantes; articulus 3us brevis, distinctus. Antennæ breves, pectinatæ, apice crenulatæ. *Fœm.*—Palpi producti, rostriformes, contigui, incumbentes; articulus 3us elongatus, conicus. Antennæ robustæ, crenulatæ.

*Dyspteris*, Hübn. *Verz. Schm.* 286. *Guen. Phal.* i. 361.

Body slender. Proboscis short, slight. Legs slender, smooth; hind tibiæ with four long spurs. Wings very unequal, with a short fringe. Fore wings ample, triangular, with acute tips; interior border short. Hind wings oblong, very small, as if abortive; interior border folded. *Male.*—Palpi slender, slightly bent, extending beyond the front; third joint short, distinct. Antennæ short, pectinated to much beyond half the length, with successively decreasing branches, crenulated towards the tips. *Female.*—Palpi elongated, rostriform, conniving, incumbent; third joint conical, as long as the second. Antennæ robust, crenulated.

### North America.

#### 1. DYSPTERIS ABORTIVARIA.

*Glauco-viridis*; alæ fimbria alba; anticæ lineis duabus obliquis subrectis subparallelis guttaque discali albis; posticæ linea exteriori alba.

*Geometra abortivaria*, Herr.-Sch. *Exot. Schm.* pl. 61, f. 346.

*Dyspteris abortivaria*, *Guen. Phal.* i. 363, 572.

a—c. Trenton Falls, New York. Presented by E. Doubleday, Esq.

d. ———? From Mr. Milne's collection.

## South America.

### 2. DYPSTERIS LOBOPHORARIA.

*Glauco-viridis, abdomen valde acutum; alæ albo maculate, lineis duabus parallelis, fimbria alba viridi nigro punctata; anticæ subfalcata; posticæ angustæ, postice subquadrata.*

*Dyspteris lobophoraria, Guen. Phal. i. 362, 569.*

Brazil.

### 3. DYSPTERIS DIMINUTARIA.

*Mas. Cæruleo-viridis; alæ lineis duabus exterioribus parallelis subundulatis albidis, fimbria testacea nigro notata.*

*Dyspteris diminutaria, Hübn. Exot. Schm. Zutr. f. 171, 172; Verz. Schm. 286, 2790. Guen. Phal. i. 362, 570.*

Surinam.

*Var. ? Male and female. Glauco-green. Front deep green. Fore tibiæ and fore tarsi with black bands. Wings with two deeper green parallel nearly straight whitish-bordered lines, and with a denticulated whitish submarginal line; fringe with black points. Fore wings with a white discal dot. Length of the body 5 lines; of the wings 14 lines.*

a. Ega. From Mr. Bates' collection.

b. Santarem. From Mr. Bates' collection.

c. Pará. Presented by Gordon Graham, Esq.

d. Honduras. From Mr. Dyson's collection.

### 4. DYSPTERIS INÆQUARIA.

*Mas et foem. Glauco-viridis; frons et palpi saturatiores; alæ lineis duabus albis dentatis parallelis, fimbria alba nigro punctata; anticæ magnæ, trigonæ, margine exteriori subrecto, lunula discali parva alba; posticæ margine exteriori recto, angulo interiori acuto.*

*Dyspteris inæquaria, Guen. Phal. i. 363, 571.*

Cayenne.



*Var.?* Glaucous-green. Wings with the fringe white, black-pointed. Fore wings subfalcate, with two parallel slightly undulating lines, and with a white discal point or lunule; costa with black points towards the tip. Hind wings with the exterior line distinct. Length of the body 3—3½ lines; of the wings 8—9 lines.

The species here described is smaller than *D. abortivaria*, but Guenée observes that that species is smaller than *D. inaquaria*.

*a.* Parà. From Mr. Bates' collection.

*b—d.* Ega. From Mr. Bates' collection.

### 5. DYSPTERIS NAIADARIA.

*Mas et fœm. Alba; frons et palpi virides fusco pallido varii; alæ strigis transversis costa margineque exteriori glauco-viridibus, umbris duabus obliquis rectis saturatioribus, linea submarginali plus minusve dentata punctoque discali albis, fimbria subconspurcata fusco punctata.*

*Dyspteris Naiadaria*, Guen. *Phal.* i. 363, 573.

Brazil.

*Var.?* *Male.* Glaucous-white. Front and palpi deep green; third joint of the latter brown. Wings transversely green-marked, with two deep green broad straight oblique nearly parallel lines, and with an indistinct white denticulate submarginal line; fringe with black points. Fore wings with a fawn-coloured costa and with a white discal dot. Length of the body 5 lines; of the wings 16 lines.

*a.* Venezuela. From Mr. Dyson's collection.

### 6. DYSPTERIS LEGITIMARIA.

*Mas. Alba; frons viridi fuscoque varia; alæ lineis quatuor glauco-viridibus subundulatis; antica costa glauco-viridi, lineis 2a et 3a antice abbreviatis; postica lineis 3a 4aque apud angulum anteriorem confluentibus.*

*Dyspteris legitimaria*, Guen. *Phal.* i. 364, 574.

Brazil.

## 7. DYSPTERIS AMATA.

*Alba, magna; alæ lineis quatuor viridibus perobliquis ex parte dilatatis; anticæ costa basique viridibus.*

*Phalæna-Geometra Amata, Cram. Pap. Exot. iii. 62, pl. 228, f. F.*

*Dyspteris breviataria, Hübn. Verz. Schm. 286, 2789.*

*Dyspteris Amata, Guen. Phal. i. 364, 575.*

Surinam.

## 8. DYSPTERIS EGREGIARIA.

*Mas et fœm. Alba; frons et vertex virides; anticæ costa, lineæ exteriori duplicata extus subdilata, lineæ submarginali liturisque nonnullis transversis viridibus; posticæ lineis exteriori et submarginali punctisque duobus intermediis viridibus.*

*Dyspteris egregiaria, Guen. Phal. i. 364, 576, pl. 8, f. 6.*

This species and *D. Amata* may be identical.

Brazil.

## Genus 9. CHLOROCHROMA.

Corpus gracile. Proboscis distincta. Palpi robusti, rude squamosi, frontem attingentes; articuli indistincti. Thorax et abdomen pallido unilineata. Abdomen cylindrico-conicum, apice acutum. Pedes mediocres; tibiæ posticæ quadricaratae, non incrassatae. Alæ integræ, velutinæ, virides, strigis nullis; anticæ trigonæ, acutæ, margine exteriori recto; posticæ margine exteriori rotundato, angulo interiori acuto. *Mas*.—Antennæ pectinatae, sat longæ, apice filiformes. *Fœm*.—Antennæ filiformes.

*Chlorochroma, Dup.; Guen. Phal. i. 365.*

Body slender. Proboscis distinct. Palpi robust, coarsely squamous, extending to the front; joints indistinct. Thorax and abdomen with a pale line; the latter cylindric-conical, with an acute tip. Legs moderately long; hind tibiæ not incrassated, as long as the femora, with two pairs of robust equal spurs. Wings entire, velvety, green, without streaks. Fore wings triangular, acute at the tips; exterior border straight. Hind wings with the exterior border rounded; interior angle acute. *Male*.—Antennæ pectinated, rather long, filiform at the tips. *Female*.—Antennæ filiform.

Nearly all the following eleven species are very closely allied to each other, and their differences seem to be of recent origin, or to have been effected by local circumstances.

- A. Alæ posticæ gutta discali rosea. - - - Cadmearia, *Guen.*
- B. Alæ gutta nulla rosea.
  - A. Alæ fimbria nigro notata. - - - externa, *Walk.*
  - B. Alæ fimbria non notata.
    - A. Alæ non lineatæ.
      - a. Alæ fimbria rosea. - - - congenita, *Walk.*
      - b. Alæ fimbria alba. - - - inchoata, *Walk.*
    - B. Alæ bilineatæ.
      - a. Alæ margine exteriori luteo.
        - i. Alæ linea nulla rubra. - - citrolimbaria, *Guen.*
        - ii. Alæ linea marginali rubra. - - decissima, *Walk.*
      - b. Alæ margine exteriori non luteo.
        - i. Alæ fimbria non unicolori.
          - \* Alæ fimbria apice rosea. - - dichloraria, *Guen.*
          - \*\* Alæ fimbria basi rubra. - - intermixta, *Walk.*
        - ii. Alæ fimbria unicolori.
          - \* Alæ fimbria rosea. - - Vertumnaria, *Guen.*
          - \*\* Alæ fimbria lutea. - - Carenaria, *Guen.*
      - c. Alæ lineis plurimis. - - plurilineata, *Walk.*

### 1. CHLOROCHROMA DICHLORARIA.

*Late viridis; caput roseum, vertice albo; thorax et abdomen albo lineata; pedes supra rosei; alæ linea exteriori alba valde dentata, fimbria roseo-albida; anticæ linea interiori dentata, costa alba basi rosea.*

*Chlorochroma dichloraria*, *Guen. Phal. i. 365, 577, pl. 6, f. 8.*

a, b. Australia. Presented by Major-General Hardwicke.

c. Tasmania. From Mr. A. J. Smith's collection.

### 2. CHLOROCHROMA VERTUMNARIA.

*Cærulescente-viridis; caput roseum, vertice albo; thorax antice pedesque rosei; alæ linea exteriori dentata alba indistincta aut subobsoleta, fimbria rosea; anticæ costa rosea.*

*Chlorochroma Vertumnaria*, *Guen. Phal. i. 365, 578.*

Tasmania.

Var.? Mas et foem. *Pallidissime albido-viridis*; caput roseum, vertice albo; alæ lituris nullis, fimbria pallide rosea; antica costa albida roseo marginata.

*Male and female.* Very pale whitish green. Head and anterior legs rosy; vertex white. Wings without any markings; fringe pale rosy, of one colour. Fore wings with a whitish rosy-bordered costa. Length of the body 6—7 lines; of the wings 16 lines.

a. Tasmania. From the collection of the Entomological Society.

### 3. CHLOROCHROMA CADMARIA.

*Læte viridis*; caput roseum, vertice albo; thorax antice pedesque rosei; alæ linea exteriori indistincta dentata albida, fimbria rosea basi alba; antica costa rosea albo marginata; postice macula discali rosea.

*Chlorochroma Cadmaria*, Guen. *Phal.* i. 365, 579.

a—c. Australia. From Mr. Damel's collection.

d. Sydney. From Mr. Lambert's collection.

### 4. CHLOROCHROMA CARENARIA.

Var.? *Glauco-viridis*; caput roseum, albo fasciatum; thorax et abdomen albo vittata; pedes supra rosei; alæ lineis duabus albidis indistinctis dentatis, fimbria lutea; antica costa lutea.

*Chlorochroma Carenaria*, Guen. *Phal.* i. 366, 580.

a, b. Australia. From Mr. Damel's collection.

c, d. Australia.

e. Sydney. From Mr. Diggles' collection.

f. Tasmania. Presented by — Walcott, Esq.

### 5. CHLOROCHROMA CITROLIMBARIA.

*Læte viridis*; caput roseum, vertice albo; thorax margine antico vittaque croceis; abdomen albo vittatum; pedes supra rosei; alæ linea exteriori punctulari albida, margine fimbriaque testaceis; antica costa crocea.

*Chlorochroma citrolimbaria*, Guen. *Phal.* i. 366, 581.

Australia.

a. Tasmania. Presented by M. Allport, Esq.

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6. CHLOROCHROMA INTERMIXTA.

**Mas et fœm.** *Saturate glauco-viridis; vertex albus; abdomen apice album; alæ linea exteriorè angulosa indistincta albida, fimbria albida basi purpurascente-rosea; antica linea interiorè angulosa albida, costa alba.*

**Male and female.** Deep sea-green, much paler beneath. Vertex, body beneath and abdomen towards the tip white. Wings with a whitish zigzag indistinct exterior line; fringe whitish, purplish rosy at the base. Fore wings with an interior zigzag whitish line; costa white. Length of the body 5—6 lines; of the wings 14—15 lines.

**a. Australia.** Presented by the Entomological Club.

**b. Sydney.** From Mr. Lambert's collection.

7. CHLOROCHROMA INCHOATA.

**Fœm.** *Herbido-viridis; corpus album; caput antice subcervinum; alæ lituris nullis, fimbria alba; antica costa alba.*

**Female** Grass-green. Body white. Head dull fawn-colour in front. Wings without any markings; fringe white, of one colour. Fore wings with a white costa. Length of the body 4—5 lines; of the wings 10—12 lines.

**a, b. New South Wales.** From Mr. Wood's collection.

8. CHLOROCHROMA PLURILINEATA.

**Fœm.** *Pallide glauco-viridis; caput saturate rufum, vertice albo; alæ gutta discali saturate viridi, lineis quinque exterioribus nonnullisque interioribus albidis parallelis subundulatis, fimbria alba.*

**Female.** Pale sea-green. Head deep red; vertex white. Anterior legs deep red above. Wings with a deep green discal dot, with five exterior whitish parallel slightly undulating lines, and with fewer and less distinct interior lines; fringe white, of one colour. Fore wings with the costa hardly differing from the ground hue of the wings. Length of the body 4 lines; of the wings 12 lines.

**a. Tasmania.** From Mr. A. J. Smith's collection.

## 9. CHLOROCHROMA DECISISSIMA.

**Fœm.** *Saturate glauco-viridis, subtus pallide ochracea; caput viridi-ochraceum, vertice albo; alæ lineis duabus angulosis indistinctis albidis, margine exteriori ochraceo lineam coccineam includente, fimbria rosea basi albida; anticæ costa ochracea.*

**Female.** Deep sea-green. Head ochraceous, tinged with green; vertex white. Body and wings beneath and legs pale ochraceous. Wings with two indistinct zigzag whitish lines; exterior border ochraceous, with a crimson line between it and the fringe, which is rosy with a whitish base. Fore wings with an ochraceous costa. Length of the body 6 lines; of the wings 16 lines.

**a. Tasmania.** Presented by M. Allport, Esq.

## 10. CHLOROCHROMA CONGENITA.

**Fœm.** *Cerulescente glauco-viridis; caput saturate rufum, vertice albo; thorax et abdomen albo lineata; alæ amplæ, lituris nullis, fimbria pallide rosea basi alba; anticæ costa alba basi apiceque rosea.*

**Female.** Bluish sea-green. Head deep red; vertex white. Thorax and abdomen with a white line. Anterior legs rosy. Wings ample, without any markings; fringe pale rosy, white at the base. Fore wings with a white costa, which is rosy beneath at the base and at the tip. Length of the body 6 lines; of the wings 16 lines.

**a. Tasmania.** From Mr. Argent's collection.

## 11. CHLOROCHROMA EXTERNA.

**Fœm.** *Læte glauco-viridis; caput roseum, vertice albo; alæ lineis subobsoletis, puncto discali nigricante indistincto, margine exteriori albo, fimbria rosea nigro punctata; anticæ costa rosea.*

**Female.** Bright sea-green, paler beneath. Head, palpi and anterior legs rosy red; vertex white. Wings with the lines nearly obsolete; a blackish indistinct discal point; exterior border white; fringe rosy, with black points. Fore wings with a rosy costa. Length of the body 5 lines; of the wings 14 lines.

**a. Sydney.** From Mr. Lambert's collection.

## Genus 10. EUCROSTIS.

Corpus sat validum. Proboscis nulla. Palpi porrecti, contigui, squamosi, frontem non superantes, articulo 3o minimo. Antennæ breves, maris pectinatæ, apice crenulatæ, fœm. subpectinatæ. Abdomen maris robustum, conicum. Pedes breves; tibie posticæ bicalcaratæ. Alæ integræ, spissæ, velutinæ, virides, concolores, fimbria rufa; posticæ rotundatæ.

*Eucrostis*, Hübn. *Verz. Schm.* 283; *Leder.*; *Guen. Phal.* i. 366.  
*Geometra*, p. *Treit.*; *Dup.*; *Boisd.*; *Herr.-Sch.*

Body rather stout. Proboscis obsolete. Palpi porrect, contiguous, squamous, not extending beyond the front; third joint very minute. Antennæ short. Legs short; hind tibie with only one pair of spurs. Wings entire, dense, velvety, green, alike in colour, with a red fringe. Hind wings rounded. *Male*.—Antennæ pectinated, crenulated at the tips; branches robust, spatulate. Abdomen robust, conical. *Female*.—Antennæ slightly pectinated; branches dentiform.

## Europe.

## 1. EUCROSTIS INDIGENARIA.

*Prasino-viridis*; caput flavum, antice rubrum; thorax antice flavescens; alæ linea exteriorre pallidiore undulata indistincta, linea marginali flavo-marginata fimbriaque rubris, puncto discali ochraceo; anticæ costa flava, puncto discali minimo.

———— Villers, *Linn. Ent.* ii. 383, 632, pl. 6, f. 19.

*Geometra indigenaria*, Bork. *Eur. Schm.* v. 485, 238. *Herr.-Sch.*  
*Eur. Schm.* iii. 9, 6.

*Fidonia indigenaria*, *Treit. Schm.* vi. 269, 5.

*Hemithea indigenaria*, *Dup. Lep.* iv. 466, pl. 168, f. 5. *Frey. Beitr.*  
i. pl. 78, f. 4. *Boisd. Ind.* 181, 1430.

*Geometra fimbriolaria*, Hübn. *Geom.* pl. 91, f. 468.

*Eucrostis fimbriolaria*, Hübn. *Verz. Schm.* 283, 2770.

*Eucrostis indigenaria*, *Guen. Phal.* i. 367, 582.

South France. Dalmatia. Spain.

a, b. Europe. From M. Becker's collection.

c. Spain. From Dr. Leach's collection.

## West Indies.

## 2. EUCROSTIS DOMINICARIA.

*E. indigenariæ simillima; alæ linea exteriorè magis undulata, linea marginali flava latiore; anticæ puncto discali sat magno, costâ subtus late et diffuse rufescente.*

*Eucrostis dominicaria*, *Guen. Phal.* i. 367, 583.

*a—c.* St. Domingo. From Mr. Tweedie's collection.

The close resemblance between the two preceding species sufficiently indicates that they have a common origin, and that their difference is owing to the regions which they severally inhabit.

## South America.

## 3. EUCROSTIS EXPULSATA.

*Fœm. Pallide viridis, subtus albida; caput et abdomen rufescentia; vertex albus; palpi porrecti, articulo 3o longo; alæ linea marginali purpurascente-rufa postice dilatata extus albo marginata, punctis marginalibus purpurascente-rufis, fimbria pallide aurata; anticæ apice rotundatæ, puncto discali fusco, costâ purpurascente-rufa subaurata.*

*Female.* Pale green, whitish beneath. Head and abdomen reddish; vertex white. Palpi porrect, extending rather far beyond the head; third joint more than half the length of the second. Wings with a purplish red marginal line, which is dilated by the interior border and is bordered with white on the outer side, this latter with purplish red points opposite the veins; fringe pale gilded. Fore wings rounded at the tips; discal point brown; costa straight, purplish red, slightly gilded. Hind wings extending beyond the abdomen. Length of the body  $2\frac{1}{2}$  lines; of the wings 7 lines.

*a.* Ega. From Mr. Bates' collection.

## South Africa.

## 4. EUCROSTIS RUFOCILARIA.

*Herbido-viridis; alæ rufo-fimbriatæ; posticæ rufæ, margine exteriorè viridi.*

*Eucrostis rufociliaria*, *Herr.-Sch. Exot. Schm.* pl. 61, f. 345. *Guen. Phal.* i. 367, 584.

Cape.



## Ceylon.

## 5. EUCROSTIS DISPARATA.

**Mas.** *Læte viridis; caput cervinum, albo fasciatum; palpi ascendentes, articulo 3o longo; antennæ late pectinatæ; alæ subrotundatæ, linea exteriori tenui obliqua albida, linea marginali flavescente, lunulis marginalibus cervinis, fimbria cinereo-cervina.*

**Male.** Vivid green, paler beneath. Head fawn-colour, with a transverse white line between the antennæ. Palpi ascending, rising higher than the vertex; third joint nearly as long as the second. Antennæ broadly pectinated. Wings with a slight oblique exterior whitish line; marginal line yellowish; marginal lunules and fringe fawn-colour, the latter with a cinereous tinge. Fore wings somewhat rounded at the tips; costa straight; exterior border slightly convex. Hind wings with the exterior border more distinctly convex. Length of the body  $2\frac{1}{2}$  lines; of the wings 7 lines.

**a.** Ceylon. Presented by Dr. Templeton.

## Australasia.

## 6. EUOROSTIS DYAKARIA.

**Mas.** *Læte viridis; palpi porrecti, subangulati, articulo 3o longiusculo; antennæ albæ, pectinatæ, triente apicali filiformi; alæ amplæ, puncto discali lineaque marginali nigricantibus, fimbria testacea; anticæ subrotundatæ, costa testacea.*

**Male.** Vivid green, paler beneath. Head white about the base of the antennæ. Palpi porrect, extending somewhat beyond the head, slightly angular; third joint about half the length of the second. Antennæ white, pectinated to two-thirds of the length. Wings ample, with a blackish discal point and a blackish marginal line, which is interrupted by a testaceous point in front of each vein; fringe testaceous. Fore wings somewhat rounded at the tips; costa testaceous. Length of the body  $2\frac{1}{2}$  lines; of the wings 7 lines.

**Sarawak, Borneo.** In Mr. Saunders' collection.

## Genus 11. OMPHAX.

**Mas.** Corpus sat robustum. Frons plana. Proboscis vix conspicua. Palpi recti, brevissimi, articulis indistinctis. Antennæ

robustæ, simplices, intus velutinæ. Abdomen basi bicristatum. Tibiæ posticæ quadricalcaratæ. Alæ integræ, spissæ, velutinæ, lituris nullis; posticæ margine exterioro convexo subflexo, angulo interiore subproducto.

*Omphax*, *Guen. Phal.* i. 368.

*Male.* Body rather stout. Front flat. Proboscis rudimentary. Palpi straight, extremely short; joints indistinct. Antennæ robust, simple, pubescent on the inside. Abdomen with two small crests at the base. Hind tibiæ with two equal and approximate pair of spurs. Wings entire, dense, velvety, without markings. Hind wings with the exterior border slightly bent, and with the interior slightly elongated.

#### 1. *OMPHAX PLANTARIA.*

*Mas.* *Prasino-viridis; frons rufescens; abdomen flavescens-album, rufescente cristatum, basi viride; alæ punctis marginalibus fuscis, fimbria violaceo-cinerea interlineata; antica costa rufescente et ochraceo notata.*

*Omphax plantaria*, *Guen. Phal.* i. 368, 585.

#### Genus 12. *COMIBÆNA.*

Corpus gracile, squamosum. Proboscis distincta. Palpi recti, lati, squamoso-hirsuti, frontem superantes; articulus 3us distinctus, filiformis, fœm. longior. Abdomen læve, apice quadratum. Pedes breviusculi; tibiæ squamosæ, latæ; posticæ quadricalcaratæ. Alæ obscuræ, non angulatæ, fimbria discolori. *Mas.*—Antennæ pectinatæ, apice filiformes. *Fœm.*—Antennæ subgranulatæ.

*Comibæna*, *Hübner. Verz. Schm.* 284.

*Geometra*, p. *Treit.*; *Herr.-Sch.*

*Phorodesma*, *Boisd. Ind.* 179; *Leder.*; *Guen. Phal.* i. 368.

Body slender, squamous. Proboscis distinct. Palpi straight, broad, squamous-hirsute, extending beyond the front; third joint distinct, filiform, longest in the female. Abdomen smooth, slightly velvety, quadrate at the tip. Legs rather short; tibiæ squamous, broad; hind tibiæ with four spurs; first pair very slender. Wings dull, not angular; interior angle tinged with ochraceous or with ferruginous; fringe not of the ground colour. *Male.*—Antennæ pectinated, filiform at the tips; branches slender, linear. *Female.*—Antennæ slightly granulated.

## Europe.

## 1. COMIBÆNA BAJULARIA.

*Viridis; caput et abdomen alba; alæ plaga apud angulum interiorrem fimbriaque albis fusco notatis; anticæ costa lineisque duabus dentatis albis; posticæ lunulis marginalibus albis fusco interlineatis.*

———, *Geoff. Ins. Par.* ii. 126, 33.

*Geometra bajularia*, *Wien. Verz.* 97, 6. *Bork. Eur. Schm.* v. 39, 12. *Esp. Schm.* v. 244, pl. 46, f. 5. *Hübner. Geom.* pl. 1, f. 3. *Ill. N. Ausg. dess.* i. 369, 6. *Treit. Schm.* vi. 122, 9. *Dup. Lep.* iv. 265, pl. 151, f. 2. *Frey. Beitr.* pl. 30, f. 1. *Herr.-Sch. Eur. Schm.* iii. 9.

*Geometra pustularia*, *Naturf.* xi. 72, 35. *Berl. Mag.* iv. 5, 520. *Knoch, Ins.* pl. 1, f. 2. *Panz. Faun.* 41, 24.

*Phalæna ditaria*, *Fabr. Ent. Syst.* iii. 2, 152, 82. *Haw. Lep. Brit.* 299. *Donov. Brit. Ins.* iv. 51, pl. 202, f. 2.

*Comibæna bajularia*, *Hübner. Verz. Schm.* 284, 2774.

*Phorodesma bajularia*, *Boisd. Ind.* 179, 1417. *Steph. Ill. Brit. Haust.* iii. 181. *Guen. Phal.* i. 369, 586.

a—d. England. From Mr. Stephens' collection.

e, f. England.

g. Europe. From M. Becker's collection.

h—i. ——— ?

## 2. COMIBÆNA NERIARIA.

*C. bajulariæ simillima; palpi magis producti; abdomen fæm. macula basali alba rufo marginata; alæ anticæ puncto discali magis notata, macula apud angulum interiorrem parva e punctis duobus albis rufo marginatis, lineis minus dentatis.*

*Geometra Neriaria*, *Herr.-Sch. Eur. Schm.* iii. 62, f. 429.

*Phrodésma Neriaria*, *Guen. Phal.* i. 369, 587.

Brusa. Beyrout.

## South America.

Some of the following species differ much from the typical form of *Comibæna*, which is represented by *C. Venezuelata*.

## 3. COMIBÆNA OCELLATA.

*Viridis; alæ linea marginali albida, plagis duabus marginalibus subannulatis rubris, fimbria rufescente.*

*Phalæna-Geometra ocellata*, Stoll, *Cram. Pap. Exot.* v. 156, pl. 34, f. 9.

*Comibæna gerularia*, Hübn. *Verz. Schm.* 284, 2775.

*Phorodesma Stollaria*, Guen. *Phal.* i. 370, 590.

Surinam.

## 4. COMIBÆNA? INCLUSARIA.

*Alba; alæ disco viridi valde inciso, lunula discali fusca, linea submarginali indeterminata fusciscente, punctis marginalibus elongatis nigris.*

*Thalera inclusaria*, Herr.-Sch. *Exot. Schm.* pl. 61, f. 341.

*Phorodesma? inclusaria*, Guen. *Phal.* i. 371, 592.

Brazil.

## 5. COMIBÆNA TRILUNARIA.

Mas. *Prasino-viridis, subtus glauco-alba; alæ fimbria violaceo-cinerea, puncto discali albo violaceo-marginato; anticae maculis duabus magnis marginalibus rotundatis flavescente-fuscis violaceo-roseo cinereo et flavo marginatis, lunula discali e squamis albis; posticae bimaculatae.*

*Phorodesma trilunaria*, Guen. *Phal.* i. 372, 594.

Brazil.

## 6. COMIBÆNA? MARGINARIA.

*Alba; alæ extus virides, fimbria rosea.*

*Phalæna-Geometra marginaria*, Stoll, *Cram. Pap. Exot.* v. 156, pl. 34, f. 8.

*Phorodesma semialbaria*, Guen. *Phal.* i. 372, 595.

Brazil.

## 7. COMIBÆNA VENEZUELATA.

Mas. *Viridis; caput albidum; palpi porrecti, articulo 3o minimo; antennæ late pectinatae; abdomen albidum, subcristatum; alæ fascia marginali pallide lutea roseo strigata*

*intus undulata alboque marginata, linea marginali nigricante-fusca, fimbria aurata; antica subfulcata, costa albida fusco conspersa strigam albam arcuatam lanceolatam emittente; posticæ dilatatæ, litura diffusa subapicali nigricante.*

**Male.** Green, whitish beneath. Head whitish. Palpi porrect, not extending beyond the head; third joint very minute. Antennæ broadly pectinated to five-sixths of the length. Abdomen whitish, slightly crested. Wings ample, with a pale luteous rosy-streaked marginal band, which widens irregularly from the tips of the fore wings to the interior angle of the hind wings, and is bounded on the inner side by an undulating white line; marginal line blackish brown; fringe gilded. Fore wings subfalcate; costa whitish, brown-speckled; a white curved lanceolate streak extending from the costa to the disk. Hind wings prolonged hindward, extending far beyond the abdomen, with a diffuse subapical blackish mark. Length of the body 4 lines; of the wings 12 lines.

**a. Venezuela.** From Mr. Dyson's collection.

### South Africa.

The following species agree in structure with the European *Comibana*.

#### 8. COMIBÆNA DIDUCTA.

**Mas.** *Viridis; caput cervinum; vertex et abdomen alba; palpi porrecti, caput non superantes, articulo 3o minimo; antennæ triente apicali simplici; alæ macula discali alba; antica acutæ, macula apud angulum interiorem alba rotundata roseo notata nigro intus marginata; posticæ margine exteriori angulato antice subexcavato postice subtruncato.*

**Male.** Grass-green. Head fawn-colour; vertex, abdomen and legs white. Palpi porrect, not extending beyond the head; third joint very minute. Antennæ pectinated to full two-thirds of the length. Hind tibiæ with four long spurs. Wings with a white discal spot. Fore wings acute; costa and exterior border slightly convex, the latter rather oblique; a round white spot with a rosy disk, and bordered with black on the inner side near the interior angle. Hind wings with the exterior border angular in the middle, slightly excavated on the fore part and slightly truncated hindward. Length of the body 6 lines; of the wings 16 lines.

**a. South Africa.** From Mr. Argent's collection.

## 9. COMIBÆNA DEVOLUTA.

**Mas.** *Viridis; caput fuscum, vertice albo; antennæ subpectinatae, apice filiformes; thorax antice albus; abdomen album, bicristatum, basi viride; alæ albæ, elongatæ, iridescentes, fascia latissima viridi, spatio marginali viridescente consperso; anticæ subfalcatæ, fascia antice dilatata et abbreviata, plagis duabus exterioribus viridibus, linea basali annuloque discali albis, margine exteriori angulato; posticæ fascia extus excavata, margine exteriori emarginato bidentato.*

**Male.** Green, white beneath. Head brown; vertex white. Antennæ slightly pectinated, filiform towards the tips. Thorax white in front. Abdomen white, with two crests towards the base, which is green. Hind tibiæ with four approximate spurs. Wings ample, elongate, white, iridescent, with a very broad green band, which is indented along the outer side in the hind wings and on the fore wings extends to the base, but not to the costa, and is much dilated exteriorly in front; marginal space and costa with greenish speckles; marginal lunules greenish. Fore wings subfalcate, very acute, with a green patch near the tip of the costa, and another on the angle of the exterior border; a white line near the base and a white discal ringlet which emits an oblique branch hindward. Hind wings with the exterior border emarginate and forming two acute teeth. Length of the body 7 lines; of the wings 18 lines.

West Africa. In Mr. Saunders' collection.

## Hindostan.

The species of this region comprise various forms, and may constitute several genera.

## 10. COMIBÆNA CASSIDARIA.

**Mas et fœm.** *Pallide pistaceo-viridis; tibiæ anticæ fasciculo squamoso; alæ linea marginali fimbriaque purpurascens-rufis, strigis marginalibus albis, puncto discali nigro; anticæ costæ alba, lineis duabus tremulis albidis, macula apud angulum anteriorem obscure rufa.*

*Phalæna exspectata?* *Fabr. Ent. Syst.* iii. 2, 191, 225.

*Phorodesma cassidaria*, *Guen. Phal.* i. 370, 589.

Hindostan.

## 11. COMIBÆNA PARTITA.

**Mas.** *Alba; palpi porrecti, angulati, articulo 3o longissimo; antennæ pectinatæ; thorax antice viridis; tibiæ posticæ bicalcaratæ; alæ virides, margine latissimo albido ex parte cervino, linea interiore indistincta, punctis marginalibus nigris; anticæ acutæ, gutta discali nigra albo marginata; posticæ plaga marginali viridi, margine exteriori subangulato.*

**Male.** White. Palpi porrect, extending far beyond the head, slightly angular; third joint as long as the second. Antennæ moderately pectinated. Thorax green in front. Hind tibiæ with two apical spurs. Wings grass-green, except the very broad whitish border, which is tinged with pale fawn-colour by the interior angle of the fore wings and on the fore part of the hind wings, and on the hind part of the latter is partly green; this band is limited by a white line; interior line indistinct; marginal points black. Fore wings acute, with a black white-bordered discal dot; costa and exterior border straight. Hind wings extending far beyond the abdomen, with the exterior border slightly angular. Length of the body 5 lines; of the wings 16 lines.

**a.** Hindostan. From Mr. Milne's collection.

## 12. COMIBÆNA DEVEKATA.

**Fœm.** *Læte viridis, sat robusta; corpus pallide testaceum; caput cervinum, vertice albo; palpi porrecti, articulo 3o lanceolato longo; alæ lineis duabus, punctularibus vix conspicuis, linea marginali alba rufo marginata, anticæ acutæ, costa albida, plaga postica marginali rufa flavo conspersa et intus marginata; posticæ margine exteriori bidentato.*

**Female.** Bright green, rather stout, paler beneath. Body pale testaceous. Head fawn-colour; vertex white. Palpi porrect, extending somewhat beyond the head; third joint lanceolate, about half the length of the second. Antennæ stout. Wings ample, with a few reddish points, which indicate the interior and exterior lines; marginal festoon white, red-bordered; fringe yellow, intersected with red. Fore wings acute; costa whitish, slightly convex; exterior border convex, having along its hind part a large red yellow-speckled patch, whose darker outline is diffusedly bordered

with yellow. Hind wings with the festoon dilated and more acutely angular by the two slight teeth. Length of the body 6 lines; of the wings 16 lines.

Hindustan. In Mr. Saunders' collection.

*Mas?* *Late viridis; caput rufescens, vertice albo; palpi oblique ascendentes, articulo 3o brevissimo; antennæ pectinatæ; abdomen rufescens; alæ linea exteriori saturatiore indistincta denticulata rufescente punctata, linea marginali plagaque communi roseis nigro et purpurascente-albo conspersis, gutta discali fusca.*

*Male?* Bright green, greenish white beneath. Head reddish; vertex white. Palpi obliquely ascending; third joint conical, less than one-fourth of the length of the second. Antennæ pectinated. Abdomen reddish. Wings with an indistinct denticulated deeper green exterior line, whose angles are marked by reddish points; interior line indicated only by a few reddish points; marginal festoon rosy red, speckled with black and with purplish white; fringe whitish, intersected with rosy red, shorter than that of the female; discal dot brown; costa of the fore wings white; a large patch by the interior angle of the fore wings, and a small one on the tips of the hind wings, like the festoon in colour; the first containing a white spot. Length of the body 5 lines; of the wings 12 lines.

This may be a distinct species.

a. Hindostan. From Archdeacon Clerk's collection.

### 13. COMIBENA DISPANSA.

*Fœm.* *Viridis, subtus alba nitens; abdomen album, basi viride; tibiæ posticæ calcaribus quatuor longis; alæ linea marginali argentea fusco marginata; anticæ subrotundatæ, striga antica transversa argentea fusco marginata.*

*Female.* Green, white and shining beneath. Head wanting. Abdomen white, except towards the base. Hind tibiæ with four long spurs. Wings with a silvery white brown-bordered marginal line, which is dilated by the interior angle. Fore wings somewhat rounded, with a silvery white brown-bordered transverse streak, which extends from the costa to the disk; costa and exterior border slightly convex, the former silvery white. Hind wings extending



rather beyond the abdomen. Length of the body  $3\frac{1}{2}$  lines; of the wings 10 lines.

a. Ceylon. Presented by Dr. Templeton.

#### 14. COMIBÆNA DIVAPALA.

**Fœm.** *Læte viridis, subtus alba; caput albo fasciatum; palpi porrecti, articulo 3o longo lineari; abdomen album, fusco conspersum; tibiæ posticæ calcaribus quatuor longis; alæ amplæ, linea exteriorè indistincta alba dentata; anticæ vix acutæ, costa plagaque apud angulum interiorem albis ferrugineo-conspersis, margine exteriorè vix dentato; posticæ fasciâ marginali lata alba ferrugineo conspersa, margine exteriorè subdentato subangulato.*

**Female.** Vivid green, white beneath. Head white between the antennæ. Palpi porrect, extending beyond the head; third joint linear, shorter than the second. Abdomen white, brown-speckled. Hind tibiæ with four long spurs. Wings ample, with an exterior white dentate indistinct line. Fore wings hardly acute; costa and a patch by the interior angle white, ferruginous-speckled; costa and exterior border hardly convex, the latter hardly dentate. Hind wings with a broad marginal white ferruginous-speckled band, which is limited by the white line; exterior border slightly dentate and angular. Length of the body  $4\frac{1}{2}$  lines; of the wings 12 lines.

a, b. Ceylon. Presented by Dr. Templeton.

#### 15. COMIBÆNA GAVISSIMA.

**Fœm.** *Flavescente-viridis, subtus alba; caput album viridi-fasciatum; palporum articulus 3us nigricans, longiusculus; alæ plagiis quatuor rufescentibus, lineis sex guttularibus albis, linea 4a valde dentata; anticæ plaga costali nigricante-cinereo notata, costa convexu; posticæ abdomen longe superantes.*

**Female.** Yellowish green, white beneath. Head white, with a green band between the eyes. Third joint of the palpi blackish, much shorter than the second. Wings ample, with six white bands, which are mostly composed of dots; fourth band deeply dentate towards the interior border of the fore wings and on the adjoining part of the hind wings; this line has the dentate part included in a common deep reddish patch, and towards the costa of the fore wings

it is absorbed by a blackish cinereous-marked patch; under side with a black mark towards the tip of the costa of each wing; this mark is larger in the hind wings than in the fore wings; exterior border hardly bent. Fore wings with the costa convex. Hind wings extending far beyond the abdomen. Length of the body 6 lines; of the wings 16 lines.

Borneo.

a. Ceylon. Presented by Dr. Templeton.

### China.

#### 16. COMIBÆNA DIFFICTA.

Mas. *Viridis; caput et abdomen alba; frons testacea; palpi porrecti, brevissimi; antennæ pectinatae, apice filiformes; pedes breviusculi, sat robusti, tibiis posticis incrassatis quadriculcaratis apice productis, tibiis tarsisque anterioribus nigro fasciatis; alæ lineis tribus albis dentatis undulatis, 3a bene determinata, spatio marginali ex maxima parte albido nebulis testaceis, linea marginali nigra; anticæ uculæ.*

*Male.* Green, white beneath. Head white; front mostly testaceous colour. Palpi porrect, extending very little beyond the head; third joint very minute. Antennæ pectinated to three-fourths of the length. Abdomen white. Legs rather short and stout; hind tibiæ incrassated, with a long apical protuberance, and with four approximate spurs; anterior tibiæ and tarsi with black bands. Wings with white irregularly dentate and undulating lines; interior and middle lines slight, indistinct; exterior line well defined; space between it and the border wholly whitish and testaceous-marked in the hind wings, partly so in the fore wings; marginal line black; fringe whitish. Fore wings acute; costa straight; exterior border hardly convex. Hind wings with the exterior border very slightly convex. Length of the body 6—7 lines; of the wings 14—16 lines.

a, b. Shanghai. From the collection of the Entomological Society.

#### 17. COMIBÆNA INDUCTARIA.

Fœm. *Flavescente-viridis; alæ fimbria sordide carnea, punctis marginalibus albis; anticæ guttis quatuor albis rufo marginatis, costa alba; posticæ bimaculatæ.*

*Phorodesma inductaria*, Guen. *Phal.* i. 370, 588.

Sarawak, Borneo.

#### 18. COMIBÆNA MEGASPILARIA.

*Fœm.* *Pomacea*; *frons rufa*, *vertice albo*; *alæ puncto discali rufo*, *fimbria sordide rufa*; *anticæ costa albo rufique varia*, *macula magna saturate violaceo-carnea apud angulum interiorem*; *posticæ macula parva sordide rufa apud angulum interiorem*.

*Phorodesma megaspilaria*, Guen. *Phal.* i. 371, 593.

Sarawak, Borneo.

#### 19. COMIBÆNA CHLORARGYRA.

*Mas.* *Læte viridis*; *corpus argenteum*; *palpi breves*; *antennæ latissime pectinatæ apice filiformes*; *alæ latiusculæ, breviusculæ, linea marginali argentea nigro et rufescente marginata*; *anticæ rotundatæ fascia late interrupta costaque argenteis*; *posticæ valde rotundatæ*.

*Male.* Bright green. Body silvery whitish. Palpi short. Antennæ very broadly pectinated, with the exception of the apical third part. Wings rather short and broad; marginal line silvery white, black-bordered, reddish-tinged on the outer side, accompanied by a reddish line. Fore wings rounded at the tips, with a widely-interrupted silvery band, which is bordered like the marginal line; costa silvery, slightly convex. Hind wings much rounded. Length of the body 4 lines; of the wings 9 lines.

Sarawak, Borneo. In Mr. Saunders' collection.

#### 20. COMIBÆNA BIPLAGA.

*Fœm.* *Viridis*; *corpus testaceo-viride*; *oculi albo marginati*; *palpi subangulati, articulo 3o elongato*; *alæ linea marginali ferruginea, fimbria cinerea, puncto discali punctisque marginalibus nigris, plaga communi maxima albida ferrugineo marginata*. *Mas?*—*Pulporum articulus 3us brevissimus*; *alæ plagis ferrugineis antice attenuatis*. *Var.*—*Alæ plagis parvis interruptis*.

*Female.* Green. Body with a testaceous tinge. Head white on each side behind the eyes. Palpi slightly angular; third joint

not much shorter than the second. Abdomen not crested. Wings with a ferruginous marginal line; fringe cinereous; discal point and marginal points black. Fore wings with a ferruginous patch by the interior angle; this patch has a whitish disk and corresponds to a similar patch by the front of the exterior border of the hind wings. Length of the body 4 lines; of the wings 12 lines.

*Male?* Third joint of the palpi very short. Antennæ broadly pectinated for nearly two-thirds of the length. Patches of the wings wholly ferruginous; those of the fore wings attenuated in front. Length of the body  $3\frac{1}{2}$  lines; of the wings 9 lines.

*Var.* Fore wings with the patches small, interrupted and attenuated in front. Length of the body 3 lines; of the wings 8 lines.

Sarawak, Borneo. In Mr. Saunders' collection.

## 21. COMIBÆNA UNIPLAGA.

*Fœm.* *Testaceo-viridis, sat valida, subtus albida; caput rufescens, vertice albo; palpi porrecti, subangulati; abdomen rufescens, albo plagiatum; alæ amplæ, linea marginali purpurascente-rufa, fimbria testacea rufescente notata; anticæ subfalcatæ, costa albida testaceo marginata, puncto discali nigro, plaga apud angulum interiorem magna purpurascente-rufa.*

*Female.* Testaceous-green, rather stout, whitish beneath. Head reddish; vertex white. Palpi porrect, slightly angular; third joint very much shorter than the second. Abdomen reddish; second and third segments mostly white. Legs rather short. Wings ample, with a purplish red marginal line; fringe testaceous, with slight reddish marks. Fore wings subfalcate; costa whitish, testaceous-bordered; discal point black; a large purplish red patch by the interior angle. Hind wings with a slight bend on the exterior border; the latter in front with a purplish red streak which corresponds to the patch of the fore wings. Length of the body 6 lines; of the wings 15 lines.

Sarawak, Borneo. In Mr. Saunders' collection.

## Australia.

- |   |   |                    |
|---|---|--------------------|
| A. Alæ linea interiore nigro marginata. | - | buprestaria, Guen. |
| B. Alæ linea nulla interiore.           |   |                    |

- A.* Alæ anticæ productæ. - - - felicitata, *Walk.*  
*B.* Alæ anticæ non productæ.  
*a.* Alæ non marginatæ. - - - metaspila, *Walk.*  
*b.* Alæ late marginatæ. - - - pieroides, *Walk.*

## 22. COMIBÆNA BUPRESTARIA.

*Late viridis; abdomen albidum; alæ linea exteriorē alba valde interrupta nigro marginata, lituris marginalibus nigris albisque; anticæ linea interiorē integrā alba nigro marginata.*

*Phorodesma buprestaria*, *Guen. Phal. i. 371, 591, pl. 7, f. 4.*

*Tasmania.*

## 23. COMIBÆNA FELICITATA.

*Fœm. Late viridis; corpus album; palpi porrecti, caput longe superantes; antennæ triente apicali simplici; thorax antice viridis; abdomen basi viridescens; tibiæ anteriores fimbriatæ, nigro fasciatæ; alæ lineis exteriorē et submarginali albis subundulatis subdentatis, spatio intermedio ex parte albido, punctis marginalibus elongatis nigris; anticæ plaga apud angulum interiorem alba rufescente et nigro conspersa, costā convexa; posticæ striga marginali antica lata rufa albaque, margine exteriorē angulato, margine interiorē albo fimbriato.*

*Female.* Vivid green. Body white. Palpi porrect, extending far beyond the head; third joint about half the length of the second. Antennæ pectinated to two-thirds of the length, with a tuft at the base of each. Thorax green in front. Abdomen greenish at the base. Legs stout; anterior tibiæ fringed, with black bands. Wings ample, white beneath; exterior and submarginal lines white, slightly undulating and dentate; intermediate space partly overspread with white, which hue is most prevalent along the hind part of the interior border of the hind wings; marginal line white, containing some elongated black points; fringe interlined with cinereous, white towards the tip. Fore wings with a white reddish and black-speckled patch by the interior angle; costā and exterior border convex, the latter rather oblique; under side irregularly green along the costā. Hind wings extending much beyond the abdomen, with a broad red and white streak along the fore half of the exterior border, which is distinctly angular in the middle; this streak is represented on the under side by a black apical spot and by a blackish part of the fringe; interior border white, fringed. Length of the body 7 lines; of the wings 18 lines.

*a.* Moreton Bay. From Mr. Diggles' collection

## 24. COMIBÆNA METASPILA.

**Æm.** *Læte glauco-viridis ; oculi albo cincti ; palpi subangulati, caput longe superantes ; abdomen rufescens, basi viride ; pedes antici rosei, albo fasciati ; alæ semihyalinæ, lituris plurimis transversis lineaque exteriori tenui valde denticulata albidis, punctis marginalibus lutescentibus, fimbria rufescente-viridi notata ; anticæ vix acutæ, costa convexa rufescente-albida conspersa, gutta apud marginem interiorem rufescente.*

**Female.** Bright sea-green, much paler beneath. Head white about the eyes. Palpi porrect, slightly angular, extending much beyond the head ; third joint much shorter than the second. Abdomen reddish, green towards the base, white beneath. Fore tibiae and fore tarsi rosy, with white bands ; hind tibiae with the first pair of spurs much longer than the second. Wings ample, semihyaline, with numerous transverse whitish marks, and with a slender much denticulated exterior line ; marginal points pale luteous ; fringe reddish, interlined with a paler hue and marked at intervals with green. Fore wings hardly acute ; costa and exterior border convex ; the former reddish, whitish-speckled ; a reddish dot on the interior border before the middle. Hind wings extending much beyond the abdomen ; interior angle prominent. Length of the body 6 lines ; of the wings 16 lines.

**a.** Australia. From M. Damel's collection.

**b.** Australia. From Mr. Milne's collection.

## 25. COMIBÆNA PIEROIDES.

**Æm.** *Glauco-viridis ; corpus et alarum margo latus rufescentis nigro alboque conspersa ; caput et thorax antice viridia ; palpi subangulati, caput longe superantes, articulo 3o longissimo ; abdomen lituris nigris bivittatum ; pedes antici nigri, albo fasciati ; alæ apud discum semihyalinæ, punctis marginalibus nigris, margine exteriori dentato, fascia subtilis submarginali nigra ; anticæ acutæ, macula subapicali viridi, costa convexa albida fusco conspersa.*

**Female.** Sea-green. Body reddish, black and white-speckled, white beneath. Head green in front. Palpi porrect, slightly angular, extending far beyond the head ; third joint as long as the second. Antennæ with blackish rings. Fore border and tegulæ of the thorax green. Abdomen with two rows of elongated black marks. Hind tibiae with four moderately long spurs ; fore tibiae and fore tarsi

black, with white bands. Wings ample, semihyaline, with a very broad band along the exterior border undulating on the inner side and of the same hue as the body; marginal points black, most distinct on the under side, where there is a black submarginal band; exterior border dentate. Fore wings acute; costa and exterior border convex, the former whitish, brown-speckled, as is also the base of the wing and the adjoining part of the interior border; a green subapical spot. Hind wings extending beyond the abdomen. Length of the body 8 lines; of the wings 18 lines.

**a.** Moreton Bay. From Mr. Diggles' collection.

### Genus 13. RACHEOSPILA.

Corpus sat robustum. Palpi articulo 3o lineari plus minusve elongato. Antennæ maris pectinatæ, apice filiformes. Abdomen maris ovatum, fœm. crassum, cristatum aut maculatum. Pedes graciles, sat longi; tibiæ posticæ quadricalcaratæ. Alæ integræ, fimbria rufo notata; posticæ margine exteriori subflexo.

*Racheospila*, *Guen. Phal.* i. 372.

Body rather stout. Third joint of the palpi linear, more or less long. Antennæ of the male pectinated, filiform at the tips. Abdomen ovate in the male, thick in the female, with minute erect crests, or with white red-bordered spots. Legs slender, rather long; hind tibiæ with two pairs of spurs. Wings entire; fringe with red marks. Hind wings with the exterior border very slightly bent.

### North America.

#### 1. RACHEOSPILA LIXARIA.

**Mas.** *Glauco-viridis; frons rufa; abdomen maculis albis rufo-marginatis; alæ linea dentata viridi alba, puncto discali fusco, linea marginali rufa, punctis marginalibus albis; anticæ costa albo marginata.*

*Racheospila lixaria*, *Guen. Phal.* i. 374, 601.

North America.

### West Indies.

#### 2. RACHEOSPILA SITELLARIA.

**Mas et fœm.** *Pallide viridis; abdomen album basi viride maculis albis rufo-marginatis; alæ puncto discali lineaque marginali*

*rufis, linea flexuosa e punctis albis; antica linea 2a punctulari, costa albo marginata basi rufo-tincta.*

*Racheospila sitellaria*, Guen. *Phal.* i. 374, 600.

a. St. Domingo. From Mr. Tweedie's collection.

### South America.

#### 3. *RACHEOSPILA AGGRAVARIA.*

*Fœm. Pallide viridis; abdomen roseum, cristis tribus albis; antennæ pectinatae; alæ albo-viridi strigatae, linea marginali rufa, punctis marginalibus fimbriaque albis, puncto discali nigro rufo-marginato; antica macula rufa, costa flava.*

*Racheospila aggravaria*, Guen. *Phal.* i. 373, 597.

Cayenne?

#### 4. *RACHEOSPILA ALBOCILIARIA.*

*Pallide glauco-viridis; alæ gutta discali fusca, linea exterior undulata e punctis fuscis albo notatis, margine exteriori albo lunulis nigris incluso.*

*Geometra albociliaria*, Herr.-Sch. *Exot. Schm.* pl. 61, f. 344.

*Racheospila albociliaria*, Guen. *Phal.* i. 373, 598.

Venezuela.

#### 5. *RACHEOSPILA MICCULARIA.*

*Mas. Parva, pallide viridis; abdomen viride, cristis rufo-fuscis; alæ margine inæquali carneo-roseo atomis obscurioribus notato albo-marginato.*

*Racheospila miccularia*, Guen. *Phal.* i. 374, 599.

Cayenne?

#### 6. *RACHEOSPILA SIGILLARIA.*

*Mas. Pallide viridis; antennæ subpectinatae; abdomen maculis tribus albis rufo-marginatis; frons rufa, albo marginata; alæ linea media tenui alba, puncto discali nigro, linea marginali rufa, fimbria alba.*

*Racheospila sigillaria*, Guen. *Phal.* i. 375, 602.

Monte Video.



7. *RACHEOSPILA MARGINIPLAGA*.

**Fœm.** *Viridis*; caput rufescens, vertice albo; palpi porrecti, articulo 3o longissimo; abdomen rufescens, subcristatum; alæ semihyalinæ, macula discali magna plagis duabus excavatis lineaque marginali roseo-rufis; anticæ apice rotundatæ, costa albida basi rosea; posticæ striga apud marginem interiorem rosea.

**Female.** Green, white beneath. Head and abdomen reddish; the latter slightly crested. Vertex white. Palpi porrect, reddish, extending far beyond the head; third joint as long as the second. Hind tibiæ with the first pair of spurs much longer than the second pair. Wings semihyaline, each with a large nearly round discal spot; two excavated patches and the marginal line rosy red; first patch by the middle of the exterior border; second on the interior angle. Fore wings rounded at the tips; costa whitish, rosy red at the base; exterior border convex. Hind wings extending beyond the abdomen, with a rosy red streak along the interior border, which diverges from the body. Length of the body 4 lines; of the wings 10 lines.

Brazil. In Mr. Saunders' collection.

8. *RACHEOSPILA SATISFACTA*.

**Fœm.** *Aurato-viridis, subtus albida*; caput albidum; palpi porrecti, articulo 3o longissimo; alæ fascia basali linea fasciæque submarginali dentatis cinereis fere hyalinis, basi lutescente, fimbria longa aurato-cinerea; anticæ apice rotundatæ, costa pallide lutea; posticæ margine exteriori subangulato. Mas? — Palpi articulo 3o sat longo.

**Female.** Gilded green, whitish beneath. Head whitish. Palpi porrect, extending very far beyond the head; third joint as long as the second. Antennæ stout. Hind tibiæ with four approximate spurs. Wings cinereous and nearly hyaline and bare towards the base, and with an exterior line and a submarginal band dentate and of the same hue; base pale luteous; fringe long, gilded cinereous. Fore wings rounded at the tips; costa pale luteous, slightly convex; exterior border slightly convex, very slightly oblique. Hind wings extending beyond the abdomen, from which the interior border diverges; exterior border slightly angular at one-third of the

length from the tip. Length of the body 4 lines; of the wings 10 lines.

Brazil. In Mr. Saunders' collection.

*Male ?* Head pure white, except hindward. Third joint of the palpi much shorter than the second. Wings apparently much like those of the female, but with the markings nearly effaced.

*a.* Venezuela. From Mr. Dyson's collection.

### South Africa.

#### 9. RACHEOSPILA ARARIA.

*Fœm.* *Pallide pomacea; frons rufa, vertice albo; abdomen album basi viride maculis albis rufo marginatis; alæ puncto discali linea exteriori punctulari lineaque marginali ferrugineis; anticæ subfulcatæ; posticæ margine exteriori angulato.*

*Racheospila araria*, *Guen. Phal. i. 373, 596.*

Namaqua Region.

### Country unknown.

#### 10. RACHEOSPILA ? EXTREMARIA.

*Mas et fœm.* *Læte viridis; caput rufum, vertice albo; palpi brevissimi; antennæ maris pectinatæ; tibiæ posticæ calcari- bus quatuor parvis; alæ puncto discali nigro, lineis duabus albis obliquis vix undulatis; anticæ vix acutæ, costa albida; posticæ margine exteriori convexo.*

*Male and female.* Bright green. Head red; vertex white. Palpi very short, not extending beyond the head. Antennæ of the male moderately pectinated, except towards the tips. Hind tibiæ with four short spurs. Wings with a black discal point, and with two white oblique hardly undulating lines; fringe reddish. Fore wings hardly acute; costa and exterior border hardly convex, the former whitish. Hind wings extending beyond the abdomen; exterior border convex. Length of the body 3 lines; of the wings 8—10 lines.

*a, b.* ——— ?

## Genus 14. SYNCHLORA.

Palpi recti, caput longe superantes; articulus 3us filiformis, spatulatus, 2o non brevior. Antennæ maris et fœminæ antice incisæ. Abdomen linea dorsali alba aut cyanea, maculis viridibus. Tibiæ posticæ quadricalcaratæ. Alæ virides, integræ, lineis duabus albis dentatis optime determinatis; posticæ angulo interiore sub-producto.

*Synchlora*, Guen. *Phal.* i. 375.

Palpi straight, extending far beyond the head; third joint filiform, spatulate, as long as the second. Antennæ in both sexes with the joints notched in front. Abdomen with green spots and with a dorsal white or blue line. Hind tibiæ with two pairs of spurs. Wings green, entire, with two dentate very distinct white lines. Hind wings with the interior angle slightly prolonged.

## North America.

## 1. SYNCHLORA LIQUORARIA.

Fœm. *Pomacea*; frons obscure carnea; palpi roseo-albi; abdomen album, dorso viridi interlineato; alæ lineis duabus albis, 1a undata, 2a dentata, striga discali indistincta, fimbria apice albida; anticæ costa alba roseo marginata.

*Synchlora liquoraria*, Guen. *Phal.* i. 375, 603.

California.

## South America.

## 2. SYNCHLORA FRONDARIA.

Mas et fœm. *Flavescente-pomacea*, subtus fere alba; frons albo et rufescente-viridi varia; palpi albi, articulo 3o carneo; alæ linea exterior undata dentata alba, fimbria apice albida; anticæ costa alba.

*Synchlora frondaria*, Guen. *Phal.* i. 376, 604.

Cayeune.

## Genus 15. APLODES.

Corpus gracile. Proboscis brevis, pallida, sat robusta. Palpi breves, subascendentes, articulo 3o brevissimo. Abdomen fœminæ basi albo maculatum. Pedes sericei, albi, sat robusti; tibiæ posticæ subincrassatæ, quadricaratae. Alæ integræ, tenuissimæ, fimbria alba, lineis distinctis. *Mas.*—Antennæ pectinatæ, ramis subspatulatis, apice simpliciores. *Fœm.*—Antennæ filiformes.

*Aplodes*, *Guen. Phal. i. 376.*

Body slender. Proboscis short, pale, somewhat robust. Palpi short, slightly ascending; third joint extremely short. Abdomen of the female with white spots at the base. Legs sericeous, white, rather stout; hind tibiæ slightly dilated beneath, with two pairs of spurs. Wings entire, very delicate, with a white fringe and with distinct lines. Antennæ pectinated, simple at the tips; branches slender, subspatulate, successively decreasing in length. *Female.*—Antennæ filiform.

## 1. APLODES MIMOSARIA.

*Mas et fœm. Pallide pomacea; frons rosea; abdomen basi viride albo maculatum; tibiæ anticæ intus carneæ; alæ lineis duabus remotis tremulis fimbriaque albis; anticæ costa alba, linea 2a recta; posticæ linea 2a arcuata.*

*Phalæna aerata? Fabr. Ent. Syst. Sup. 238, 239.*

*Aplodes mimosaria, Guen. Phal. i. 377, 605.*

Georgia. Canada.

## 2. APLODES GLAUCARIA.

*Mas. Pallide viridis; vertex albus; abdomen basi viride albo maculatum; tibiæ anticæ intus roseo subinctæ; alæ lineis duabus albis remotis subdentatis; anticæ costa alba, linea 2a sinuata; posticæ linea 2a arcuata flexa.*

*Aplodes glaucaria, Guen. Phal. i. 377, 606.*

Georgia.

*Var.?* *Mas. Saturate glauco-viridis, albo vittata; vertex albus; palpi ascendentes, articulo 3o brevissimo; antennæ late pectinatæ; pedes breves, robusti; tibiæ posticæ calcaribus quatuor parvis; alæ lineis duabus undulatis denticulatis lineaque marginali albis; anticæ acutæ, costa alba.*

**Male.** Deep sea-green. Body beneath and vertex white. Palpi ascending, not rising higher than the vertex; third joint very short. Antennæ broadly pectinated to two-thirds of the length. Legs short, stout; hind tibiæ with four short spurs. Thorax and abdomen with a white stripe. Wings with two slender undulating and much denticulated white lines; marginal line white. Fore wings acute; costa white, straight; exterior border slightly convex, rather oblique. Hind wings extending beyond the abdomen; interior angle prominent. Length of the body  $2\frac{1}{2}$ —3 lines; of the wings 6—7 lines.

**a.** East Florida. Presented by E. Doubleday, Esq.

**b—c.** St. Domingo. From Mr. Tweedie's collection,

### Genus 16. THETIDEA.

Corpus sat gracile. Proboscis brevissima. Palpi squamosi, recti, frontem superantes, articulis indistinctis. Antennæ maris late pectinatæ apice filiformes, fœminæ crenulato dentatæ. Abdomen fœminæ crassum, ovatum. Tibiæ posticæ calcaribus quatuor valde approximatis; tarsi inermes. Alæ spissæ, integræ, rotundatæ, fimbria longa, lituris distinctis.

*Thetidea*, *Boisd. Ind.* 189; *Dup.*; *Guen. Phal.* i. 377.

*Geometra*, p., *Herr.-Sch.*

*Phorodesma*, p., *Lederer.*

Body rather slender. Proboscis very short. Palpi squamous, straight, extending beyond the front, with indistinct joints. Abdomen thick and ovate in the female. Hind tibiæ with two pairs of very approximate spurs; tarsi smooth. Wings dense, dull, entire, rounded; markings distinct; fringe long. **Male.**—Antennæ pectinated, with filiform tips; branches long, plumose, with recurved tips. **Female.**—Antennæ crenulata.

#### 1. THETIDEA PLUSIARIA.

*Late viridis; alæ anticæ venis strigisque angulatis argenteis; posticæ albide.*

*Thetidea plusiaria*, *Boisd. Ind.* 189, 1496. *Guen. Phal.* i. 378, 607.

*Geometra plusiaria*, *Herr.-Sch. Eur. Schm.* iii. 98, pl. 72, f. 441, 442.

Andalusia. Algeria.

## Genus 17. CHLORODES.

Corpus gracile. Frons plana. Proboscis distincta. Palpi recti, squamoso-hirsuti, frontem paullo superantes, articulo 3o indistincto. Antennæ maris pectinatæ ramis spatulatis, fœminæ tennes crenulatæ. Abdomen læve. Pedes glabri; tibiæ posticæ quadricarulatæ, non incrassatæ. Alæ densæ, læves, integræ, velutinæ, fimbria discolori; anticæ acutæ, margine exteriori subflexo; posticæ biangulatæ.

Chlorodes, *Guen. Phal.* i. 378.

Body slender. Front flat. Proboscis distinct. Palpi straight, squamous-hirsute, extending a little beyond the front; third joint indistinct. Abdomen and legs smooth. Hind tibiæ not incrassated, with two pairs of spurs. Wings entire, stout, smooth, dull, velvety; fringe not of the ground-colour. Fore wings acute, with the exterior border slightly bent. Hind wings with two angles on the exterior border. *Male*.—Antennæ moderately pectinated; branches spatulate, successively decreasing in length. *Female*.—Antennæ slender, crenulate.

## 1. CHLORODES MIRANDARIA.

*Læte viridis; vertex et abdomen alba; alæ anticæ fasciis duabus strigisque tribus obliquis albis, fascia 2a postice croceo et rufescente suffusa, striga apud marginem interiorem rufescente; posticæ albæ, viridi suffusæ litura apud angulum interiorem fusco-cervina nigro notata.*

Geometra Boisduvalaria? *Le Guillon, Rev. Zool.* 1841, 257.

Chlorodes Mirandaria, *Guen. Phal.* i. 379, 608, pl. 5, f. 7.

Tasmania.

a, b. Australia. Presented by the late Earl of Derby.

## Genus 18. PHYLE.

*Fœm.* Corpus sat robustum. Proboscis longa. Palpi compressi, squamosi, frontem paullo superantes, articulis indistinctis. Antennæ filiformes. Pedes robusti, glabri; tibiæ posticæ quadricarulatæ, femoribus multo longiores; tarsi spinosi. Alæ latæ, spissæ, integræ, concolores, lituris non diversis, fimbria discolori;

anticæ margine exteriore subconcavo; posticæ angulo interiore producto obtuso.

Phyle, *Herr.-Sch.*; *Guen. Phal.* i. 379.

*Female.* Body rather stout. Proboscis long. Palpi compressed, squamous, extending a little beyond the front; joints indistinct. Antennæ filiform. Legs robust, smooth; tarsi spinose; hind tibiæ much longer than the femora; their pairs of spurs remote from each other. Wings entire, thick, dull, broad, alike in colour and with like markings; fringe not of the ground-colour. Fore wings with the exterior border slightly concave. Hind wings with the interior angle prolonged, obtuse.

### 1. PHYLE ARCUOSARIA.

*Pistacino-viridis; alæ fimbria flava; anticæ acutæ, lineis duabus rectis ferrugineis subparallelis flavescente marginatis costam non attingentibus, costa carneo-cinerea fusco conspersa; posticæ linea exteriore subarcuata, macula apud angulum interiorem ferruginea puncta dua nigra albo marginata includente.*

Phyle arcuosaria, *Herr.-Sch. Exot. Schm.* pl. 60, f. 338. *Guen. Phal.* i. 386, 609.

Brazil.

### Genus 19. AGATHIA.

Corpus gracile, squamosum. Proboscis brevis, robusta. Palpi tennes, flexi, caput sat superantes. Antennæ simplices. Abdomen elongatum, cylindricum, cristatum, obtusum. Pedes glabri; tibiæ posticæ calcaribus quatuor remotis. Alæ amplæ; posticæ margine exteriore dentato sinuato subcaudato. *Mas.*—Palporum articulus 3us filiformis, 2i dimidio non longior. *Fæm.*—Palporum articulus 3us spatulatus, 2o non brevior.

Agathia, *Guen. Phal.* i. 380.

Body slender, squamous. Proboscis short, stout. Palpi slender, bent, extending some distance beyond the head; third joint filiform and not more than half the length of the second in the male, spatulate and as long as the second in the female. Antennæ simple. Abdomen elongated, cylindrical, with small dorsal crests, obtuse at the tip. Legs smooth; pairs of spurs on the hind tibiæ remote from each other. Wings broad. Hind wings with the exterior border dentate, subcaudate.

Kollar's description  
 alba, postica viridula  
 fascia viridis  
 postica angulata - unicolor  
 submarginali fusca, &c.  
 alba  
 habitus Hainan.

## 1. AGATHIA LYCÆNARIA.

*Læte cæruleo-viridis; caput antice pallide cervinum; alæ lineis duabus margineque exteriore pallide cervinis albido interlineatis fusco marginatis albo punctatis, linea 1a guttulari, 2a angulosa; antica costa pallide cervina; postica linea marginali apud angulum dilatata.*

*Geometra lycænaria*, Koll, Von Hug. Kasch. 486.

*Geometra albiangularia*, Herr.-Sch. Exot. Schm. pl. 61, f. 339.

*Agathia lycænaria*, Guen. Phal. i. 380, 610.

a. Hindostan. From Archdeacon Clerk's collection.

b. Silhet. From the Rev. J. Stainforth's collection.

c. Calcutta. Presented by the Secretary of the India Board.

d. Hindostan. From Mr. Milne's collection.

## 2. AGATHIA HEMITHEARIA.

*Fœm. A. lycænariæ simillima; alæ antica fascia 1a non arctata nec interrupta, extus flavescens-carnea nigro conspersa, flavo lineolata, macula subapicali viridi guttisque tribus flavis; postica spatii exteriore testaceo maculam viridem submarginalem includente.*

*Phalæna lætata?* Fabr. Ent. Syst. iii. 2, 164, 125.

*Agathia hemithearia*, Guen. Phal. i. 381, 611.

a, b. Silhet. From the Rev. J. Stainforth's collection.

## 3. AGATHIA HILARATA.

*Mas. A. lycænariæ affinis; alæ lituris violaceo-carneis fere nigricantibus; antica linea 1a integra magis recta, 2a et margine exteriore prioribus spatium viride ovatum includentibus, macula parva ovata apicali; postica macula viridi ovata submarginali.*

*Agathia hilarata*, Guen. Phal. i. 381, 612.

Hindostan.

## 4. AGATHIA CATENARIA.

*Læte viridis, subtus alba; caput cervinum; palpi oblique ascendentes, articulo 3o minimo; alæ fascia marginali cervina cinereo interlineata nigro strigata; antica subfalcata, fascia*



*antice furcata, basi costaque cervinis; postica emarginata angulata, apud angulum fusca albido bilineata, fascia maculam viridem marginalem includente.*

Vivid green, white beneath. Head fawn-colour. Palpi white, obliquely ascending; third joint very minute. Wings with a fawn-coloured marginal band, which is interlined with cinereous and streaked with black; it is forked and includes a large green spot towards the costa of the fore wings, and in the hind wings it recedes from the fore part of the exterior border and includes another green spot. Fore wings subfalcate, fawn-coloured at the base and with a fawn-coloured costal stripe, which emits a very short branch towards the disk. Hind wings emarginate, subcaudate, the caudal part deep brown, traversed by two whitish lines. Length of the body 6 lines; of the wings 16 lines.

a. Ceylon. Presented by Dr. Templeton.

b. Canara. Presented by the Secretary of the India Board.

#### 5. AGATHIA DISCRIMINATA.

*Fœm. Late viridis aut luteo-viridis, subtus albida; caput antice cervinum; palpi porrecti, articulo 3o cervino longo; tibiæ posticae calcaribus quatuor longis; alæ fascia rufescente lata aut latissima informi cinereo tincta ex parte excavata aut marginem attingente; anticae fascia angusta interiore, fascia marginali, basi costaque rufescentibus; posticae margine exteriore subexcavato, striga apud angulum alba submarginali.*

*Female.* Bright green or luteous-green, whitish beneath. Head fawn-colour in front. Palpi porrect, extending some distance beyond the head; third joint fawn-colour, more than half the length of the second. Hind tibiæ with four long spurs. Wings with a broad or very broad irregular reddish, cinereous-tinged, here and there much excavated band, which in some parts extends to the exterior border. Fore wings with a narrower interior band and with a marginal band, both irregular; base and costa also reddish. Hind wings with the exterior border slightly excavated, forming an angle, opposite to which there is a white submarginal streak. Length of the body 6 lines; of the wings 16 lines.

a, b. Hindostan. From the collection of the Entomological Society.

c. Canara. Presented by the Secretary of the India Board.

## 6. AGATHIA INTERCISSA.

*Fœm.* *Læte viridis; caput thoracisque margo anticus cinereo-fusca; abdomen albido vittatum; alæ fascia cinereo-fusca angulata interrupta, fimbria albida nigro punctata; antica basi, fascia interiore maculaque apicali cinereo-fuscis; posticæ macula apud angulum rubra extus nigro intus albido marginata.*

*Female.* Bright green, whitish beneath. Head cinereous-brown. Palpi whitish; third joint as long as the second. Thorax cinereous-brown in front. Abdomen with a whitish stripe. Wings with a cinereous-brown notched and interrupted band; fringe whitish, with black points. Fore wings cinereous-brown at the base, and with an interior band like the exterior one; costa and an apical spot of the same colour. Hind wings adorned on the marginal angle with a deep red spot, which is black-bordered on the outer side and whitish-bordered on the inner side. Length of the body 5—6 lines; of the wings 12—14 lines.

*a.* Colombo. From M. Nietner's collection.

*b.* Ceylon. From Mr. Stevens' collection.

## Genus 20. THALERA.

Corpus gracile. Proboscis distincta. Palpi varii. Alæ ample, non strigatæ, lineis distinctis, fimbria notata; anticæ apice acutæ; posticæ margine exteriori angulato. *Mas.*—Antennæ pectinatæ. Abdomen longum, gracile, fasciculo apicali radiato. *Fœm.*—Antennæ simplices. Abdomen cylindrico-conicum, apice obtusum.

Thalera, Hübn. Verz. Schm. 285.

Geometra, p., Treit.

Hemithea, Dup. Lep. iv. 106. Guen. Phal. i. 382.

Body slender. Proboscis distinct. Palpi various. Wings ample, not streaked, with distinct lines; fringe dotted. Fore wings acute at the tips. Hind wings with the exterior border angular. *Male.*—Antennæ pectinated. Abdomen long, slender; apical tuft fan-shaped. *Female.*—Antennæ simple. Abdomen cylindrical-conical, obtuse at the tip.

## Europe.

## 1. THALERA BUPLEURARIA.

*Pallide viridis; caput rubrum; pedes rosei; alæ linea exteriori undulata alba, fimbria roseo notata; antica linea interiore alba subarcuata; posticæ dentatæ.*

——— *Frisch. Ins.* x. 20, pl. 17, f. 1—3.

*Phalæua fimbrialis*, *Scop. Ent. Carn.* 535.

*Geometra bupleuraria*, *Wien. Verz.* 97, 4. *Bork. Eur. Schm.* v. 35, 10. *Hüb. Geom.* pl. 2, f. 8. *Treit. Schm.* vi. 114, 6.

*Phalæna thymiaria*, *Schwarz. Beytr.* 10, pl. 2, f. 59. *Fabr. Ent. Syst.* iii. 2, 130, 5. *Esp. Schm.* v. 34, pl. 4, f. 3—9.

*Hemithea bupleuraria*, *Dup. Lep.* iv. 236, pl. 151, f. 5. *Boisd. Ind.* 181, 1429. *Herr.-Sch. Eur. Schm.* iii. 10, 8. *Guen. Phal.* i. 383, 614.

*Thalera bupleuraria*, *Hüb. Verz. Schm.* 285, 2781.

Europe.

## 2. THALERA THYMIARIA.

*Glauco-viridis*; *alæ lineis duabus angulatis albidis viridi saturato marginatis, linea marginali nigra, fimbria alba fusco notata*; *anticæ costa alba nigro notata*; *posticæ angulatæ*.

——— *Albin, Ins.* pl. 48, f. 81.

*Phalæna-Geometra thymiaria*, *Linn. Syst. Nat.* ii. 1, 199.

*Geometra fimbriata*, *Hufn. Berl. Mag.* iv. 6, 604, 64.

*Phalæna vernaria*, *Fabr. Ent. Syst.* iii. 129, 3. *Don. Brit. Ins.* ix. pl. 310.

*Geometra strigata*, *Naturf.* ix. 83.

*Geometra æstivaria*, *Brahm. Ins. Kal.* ii. 1, 251, 144. *Bork. Eur. Schm.* v. 32, 9? *Sepp. Ins.* i. pl. 3, f. 8. *Esp. Schm.* v. pl. 2, f. 1—3. *Hüb. Geom.* pl. 2, f. 9. *Treit. Schm.* vi. 117, 7.

*Phalæna bupleuraria*? *Fabr. Ent. Syst.* iii. 2, 130, 4.

*Hemithea æstivaria*, *Dup. Lep.* iv. 239, pl. 151, f. 6. *Boisd. Ind.* 180, 1428. *Herr.-Sch. Eur. Schm.* iii. 10, 7.

*Hemithea thymiaria*, *Guen. Phal.* i. 384, 615.

a—i. England. From Mr. Stephens' collection.

j. England. From Mr. King's collection.

k, l. England.

m—o. Europe. From M. Becker's collection.

## South America.

### 3. THALERA DISTRACTA.

*Fœm. Cinerascente glauco-viridis, subtus roseo-albida*; *caput saturate rufum, vertice albido*; *palpi porrecti, articulo 3o minimo*; *tibiæ posticæ calcaribus duobus longis apicalibus*; *alæ lineis media et submarginali saturatioribus, hac angulosa*,

*illa subundulata ; antica subfalcata, basi testacea, linea interiore angulosa, gutta discali nigro-fusca, costa testacea ; postica margine exteriori subangulato.*

*Female.* Cinereous sea-green, whitish and partly with a rosy tinge beneath. Head deep red ; vertex whitish. Palpi porrect, extending very little beyond the head ; third joint very minute. Hind tibiae with two long apical spurs. Wings with the middle and submarginal lines deeper green, the former slightly undulating, the latter zigzag. Fore wings subfalcate, testaceous towards the base ; interior line zigzag ; discal dot very dark brown ; costa testaceous. Hind wings with the exterior border slightly angular in the middle. Length of the body 4 lines ; of the wings 12 lines.

Brazil. In Mr. Saunders' collection.

## South Africa.

### 4. THALERA DILATATA.

*Fœm. Pallide glauco-viridis ; caput rufescente-fuscum ; palpi porrecti, caput non superantes, articulo 3o minimo ; thorax et abdomen albo vittata ; pedes antici rufescentes ; alae fimbriae albida ; anticae acutae, costa alba ; posticae abdomen superantes.*

*Female.* Pale sea-green. Head reddish brown. Palpi reddish porrect, not extending beyond the head ; third joint extremely minute. Thorax and abdomen with a white stripe. Fore legs mostly red. Hind tibiae with four moderately long spurs. Wings ample, without any markings. Fringe whitish. Fore wings acute costa and exterior border straight, the former white. Hind wings extending beyond the abdomen, with a convex exterior border ; interior angle rather prominent. Length of the body 5 lines ; of the wings 16 lines.

a. South Africa. Presented by Sir A. Smith.

## Hindustan.

- |                                 |   |   |   |   |   |                   |
|---------------------------------|---|---|---|---|---|-------------------|
| A. Alae dentatae.               | - | - | - | - | - | robustaria, Guen  |
| B. Alae non dentatae.           |   |   |   |   |   |                   |
| A. Alae posticae non angulatae. | - | - | - | - | - | dirempta, Walk    |
| B. Alae posticae subangulatae.  |   |   |   |   |   |                   |
| a. Alae annulo discali.         | - | - | - | - | - | dis-juncta, Walk  |
| b. Alae puncto discali.         | - | - | - | - | - | flavifusata, Walk |
| C. Alae valde angulatae.        | - | - | - | - | - | acutissima. W     |

## 5. THALERA ROBUSTARIA.

**Fœm.** *Viridis; frons saturate fusca; abdomen ferrugineo conspersum; alæ dentatæ, dentibus inæqualibus, linea undatodentata saturate fusca, puncto discali lineaque marginali fuscis; posticæ linea 2a saturate viridi.*

*Hemithea robustaria*, *Guen. Phal. i. 383, 613.*

*Hindostan.*

## 6. THALERA DIREMPTA.

**Fœm.** *Pallide testaceo-viridis; palpi porrecti, caput paullo superantes, articulo 3o longiusculo; tibiæ posticæ bicalcaratæ; alæ amplæ, elongatæ, subtus cinereo strigatæ, linea marginali tenui rufa, fimbria alba; anticæ subfalcatæ, costa recta fusco subnotata; posticæ angulo interiore producto.*

*Female.* Pale testaceous-green. Palpi porrect, extending a little beyond the head; third joint slender, less than half the length of the second. Legs slender; hind tibiæ with two apical spurs, of which one is much longer than the other. Wings ample, elongate; marginal line slender, red; fringe white; under side thickly transversely and indistinctly streaked with cinereous. Fore wings subfalcate; costa straight, minutely brown-marked; exterior border slightly convex. Hind wings with the interior angle prominent. Length of the body 5 lines; of the wings 14 lines.

*a. Hindostan.* From Archdeacon Clerk's collection.

## 7. THALERA DISJUNCTA.

**Fœm.** *Glauco-viridis, subtus pallida nitens; corpus pallide testaceum; caput antice ferrugineum; palpi porrecti, graciles, subangulati, articulo 3o longissimo; tibiæ posticæ subincrassatæ, calcaribus duobus apicalibus; alæ amplæ, gutta discali rotunda testaceo-marginata lineaque marginali fuscis; anticæ subfalcatæ, costa testacea fusco conspersa; posticæ acute angulatæ.*

*Female.* Glaucons-green, shining and much paler beneath. Body pale testaceous, white beneath. Head ferruginous in front. Palpi porrect, slender, slightly angular, extending far beyond the head; third joint a little longer than the second. Hind tibiæ slightly incrassated, with two apical spurs. Wings ample, with a

brown round testaceous-bordered discal dot, and with a brown marginal line, which is interrupted by a white point opposite each vein. Fore wings subfalcate; costa and exterior border hardly convex, the former testaceous, brown-speckled. Hind wings distinctly and acutely angular, extending beyond the abdomen. Length of the body 5 lines; of the wings 12 lines.

a. Ceylon. Presented by Dr. Templeton.

### 8. THALERA FLAVIFUSATA.

*Fœm.* *Lutescente-viridis, subtus albida; vertex albus; palpi graciles, caput longe superantes, articulo 3o longissimo; tibiæ posticæ calcaribus quatuor longis; alæ lineæ exteriorē rufescente obliqua indistincta denticulata, lineæ interiorē fere obsoleta, lunulis marginalibus elongatis purpurascens-rufis; anticæ acutæ, puncto discali fusco; posticæ subangulatæ.*

*Female.* Green, tinged with pale luteous, whitish beneath. Head white between the antennæ. Palpi slender, extending far beyond the head; third joint a little longer than the second. Hind tibiæ with four long spurs. Wings with a reddish oblique indistinct denticulated exterior line, and with very slight indications of a similar interior line; marginal lunules purplish red, elongated. Fore wings acute; costa and exterior border slightly convex; a minute brown discal point. Hind wings slightly angular. Length of the body 5 lines; of the wings 12 lines.

a. Ceylon. Presented by Dr. Templeton.

### 9. THALERA ACUTISSIMA.

*Fœm.* *Testaceo-viridis; palpi graciles, subarcuati, caput vix superantes, articulo 3o minimo; tibiæ posticæ quadricaræ; alæ amplæ, lineis duabus albidis obliquis valde indistinctis et incompletis; anticæ subfalcatæ, costa vix convexa, margine exteriorē recto; posticæ abdomen longe superantes, subcaudatæ, angulo acutissimo.*

*Female.* Dull testaceous-green, paler beneath. Palpi slender, slightly curved, hardly extending beyond the head; third joint very minute. Hind tibiæ with four moderately long spurs. Wings ample, with two oblique very indistinct and incomplete whitish lines. Fore wings subfalcate; costa hardly convex; exterior border straight.

Hind wings extending very far beyond the abdomen ; exterior border subcaudate, or forming an elongate and very acute angle. Length of the body 5 lines ; of the wings 16 lines.

a. Ceylon. Presented by Dr. Templeton.

b. Ceylon. From Mr. Stevens' collection.

## China.

### 10. THALERA DIFFUSA.

**Fœm.** *Pallide glauco-viridis ; caput rufescente-cervinum, vertice albo ; palpi graciles, ascendentes, articulo 3o minimo ; tibiæ posticæ bicalcaratæ ; alæ lineis duabus albis undulatis indistinctis, linea marginali lateritia ; anticæ subfalcatæ, margine exteriori vix flexo ; posticæ margine exteriori angulato emarginato.*

**Female.** Pale glaucous green. Head reddish fawn-colour ; vertex, abdomen and legs white. Palpi slender, ascending, not rising higher than the vertex ; third joint very minute. Hind tibiæ with two moderately long apical spurs. Wings with the interior and exterior lines white, slight, undulating, indistinct ; marginal line and intervals on the fringe brick red. Fore wings subfalcate ; costa straight ; exterior border hardly bent. Hind wings extending much beyond the abdomen, with the exterior border emarginate and angular. Length of the body 3 lines ; of the wings 10 lines.

a. China. Presented by G. T. Laye, Esq.

## Australasia.

A. Alæ posticæ fusco aut albo non variæ.

A. Statura mediocris.

A. Alæ albo non lineatæ.

a. Alæ nigro marginatæ. - - - insularia, *Guen.*

b. Alæ nigro non marginatæ.

i. Alæ lineis non remotis. - - - undifera, *Walk.*

ii. Alæ lineis remotis. - - - - - vaga, *Walk.*

B. Alæ albo lineatæ. - - - - - albisparsa, *Walk.*

B. Statura parva.

A. Alæ lineatæ. - - - - - subexpressa, *Walk.*

B. Alæ non lineatæ. - - - - - innotata, *Walk.*

B. Alæ posticæ fusco variæ.

- |                                      |         |                     |
|--------------------------------------|---------|---------------------|
| A. Alæ posticæ fusco marginatæ.      | -       | discipennata, Walk. |
| B. Alæ posticæ viridi marginatæ.     | - -     | cristifera, Walk.   |
| C. Alæ posticæ margine postico albo. | -       | concioplaga, Walk.  |
| C. Alæ posticæ albo variæ.           | - . - - | semialba, Walk.     |

### 11. THALERA INSULARIA.

*Olivaceo-viridis, subtus viridi albida; caput antice rubidum; palpi rubidi, articulo 3o maris brevissimo fœm. longissimo; abdomen segmentis 2o 3o 4oque rubris fasciculatis; alæ lineis duabus indistinctis saturatioribus dentatis albo punctatis, linea marginali nigra testaceo punctata, fimbria nigro-cinerea testaceo punctata; anticæ costa lutea nigro conspersa.*

*Hemithea insularia, Guen. Phal. i. 305, 616.*

«. Sarawak, Borneo. From Mr. Wallace's collection.

### 12. THALERA VAGA.

*Mas. Albido glauco-viridis, nitens; caput albidum; palporum articulus 3us 2i dimidio non brevior; antennæ late pectinata, apice filiformes; alæ semihyalinæ, lineis duabus obscurioribus remotis valde dentatis; linea submarginali tenuiore antice diffusa; anticæ vix acutæ, costa subconvexa albo varia; posticæ angulatæ, subdentatæ.*

*Male.* Whitish glaucous-green, shining. Head whitish above. Palpi extending a little beyond the head; third joint about half the length of the second. Antennæ broadly pectinated to much beyond half the length. Hind tibiæ with the first pair of spurs much longer than the second pair. Wings semihyaline; interior and exterior lines dark green, deeply dentate, remote from each other; submarginal line more slight, nearly parallel to the border, diffuse in front on the fore wings. Fore wings hardly acute; costa slightly convex, partly white; exterior border very oblique. Hind wings slightly dentate, acutely angular. Length of the body 5 lines; of the wings 12 lines.

Sarawak, Borneo. In Mr. Saunders' collection.

### 13. THALERA CONCIOSIPLAGA.

*Mas. Luteo-viridis, subtus alba; caput album; palpi caput paullo superantes, articulo 3o brevissimo; antennæ latissime*



*pectinatae*; abdomen album; tibiae posticae bicalcaratae; alae punctis marginalibus nigris, fimbria alba; anticae falcatae, striga posticae ferruginea, puncto discali nigro; posticae plaga antica ferruginea, margine exteriori subangulato.

**Male.** Luteous-green, white beneath. Head white. Palpi extending a little beyond the head; third joint not more than one-fourth of the length of the second. Antennae very broadly pectinated. Thorax pale luteous in front. Abdomen white, with a pale luteous tinge towards the base. Hind tibiae with two long apical spurs. Wings with a common ferruginous patch, which is limited by a white line, and is chiefly on the hind wings, only forming a streak by the interior angle of the fore wings; a few marginal black points; fringe white. Fore wings falcate, with a black discal point. Hind wings with the exterior border slightly angular. Length of the body 5 lines; of the wings 12 lines.

Sarawak, Borneo. In Mr. Saunders' collection.

#### 14. THALERA SUBEXPRESSA.

**Fœm.** *Obscure viridescens, subtus albida nitens; palpi caput vix superantes, articulo 3o minimo; antennae sat validae; tibiae posticae bicalcaratae; alae linea exteriori obscuriore indistincta obliqua subrecta; anticae vix acutae; posticae margine exteriori subangulato.*

**Female.** Dull pale green, whitish and shining beneath. Palpi hardly extending beyond the head; third joint very minute. Antennae rather stout. Hind tibiae with two small apical spurs. Wings with a darker green indistinct oblique nearly straight exterior line; no other markings; fringe like the rest of the wings in colour. Fore wings hardly acute. Hind wings extending a little beyond the abdomen; exterior border slightly angular. Length of the body 3 lines; of the wings 7 lines.

Sarawak, Borneo. In Mr. Saunders' collection.

#### 15. THALERA INNOTATA.

**Fœm.** *Albido-testacea, subviridescens; palpi angulati, caput sat superantes, articulo 3o longiusculo; anticae sat validae; tibiae posticae bicalcaratae; alae lituris nullis; anticae acutae; posticae margine exteriori angulato, linea marginali purpurascente rufa, fimbria albida; anticae elongatae, vix falcatae.*

*Female.* Whitish testaceous, with a slight green tinge, the latter hue probably more prevalent in the recent state of the insect. Palpi angular, extending some distance beyond the head; third joint more than half the length of the second. Antennae rather stout. Hind tibiae with two moderately long apical spurs. Wings without markings. Fore wings acute; costa nearly straight; exterior border slightly convex, rather oblique. Hind wings not extending beyond the abdomen; exterior border distinctly angular. Length of the body  $3\frac{1}{4}$  lines; of the wings 8 lines.

Sarawak, Borneo. In Mr. Saunders' collection.

#### 16. THALERA DISCIPENNATA.

*Fœm.* *Cinereo-fusca, albido conspersa; palpi breves, articulo 3o minimo; abdomen subcristatum; alæ disco herbido-viridi, linea undulata alba, gutta discali punctisque marginalibus nigris; antica macula apicali viridi, spatio apud angulum anteriorem obscure fusco; postica margine exteriori vix flexo.*

*Female.* Cinereous-brown, speckled with whitish, whitish beneath. Palpi short; third joint very minute. Abdomen slightly crested. Wings with the disk irregularly grass-green, which hue is limited by an undulating white line, except in front of the fore wings, where the apical part is also green; a dark brown hue occupying the interior angle of the fore wings, and extending from thence along half the exterior border of the hind wings; discal dot and marginal points black. Fore wings somewhat rounded at the tips; costa and exterior border convex, the latter rather oblique. Hind wings with the white line very broad in front; exterior border hardly bent. Length of the body 5 lines; of the wings 12 lines.

Sarawak, Borneo. In Mr. Saunders' collection.

#### 17. THALERA ALBISPARSA.

*Fœm.* *Prasino-rividis; vertex albus; palpi minimi; alæ tenues, semihyalinae, glauco subinctae, albo conspersae, lineis exterioribus undulatis albis; anticae acutae, margine exteriori sat obliquo; posticae productae, margine exteriori subangulato.*

*Female.* Grass-green. Vertex white. Palpi very short and slender. Wings delicate, semihyaline, with a slight glaucous tinge, thickly speckled with white; exterior part with undulating white lines. Fore wings acute; costa hardly convex; exterior bor-

der slightly convex, rather oblique. Hind wings prolonged hindward; exterior border slightly angular. Length of the body 5 lines; of the wings 11 lines.

Sarawak, Borneo. In Mr. Saunders' collection.

### 18. THALERA UNDIFERA.

**Mas et fœm.** *Pallide glaucescente-viridis, testaceo subtineta; vertex albus; palpi brevissimi, articulo 3o minimo; antennæ maris pectinatæ fœm. pubescentes; abdomen cristatum; alæ lineis duabus parallelis subundulatis saturatioribus albo submarginatis; anticæ vix acutæ, margine exteriori perobliquo; posticæ productæ, margine exteriori subangulato.*

**Female.** Dull pale glaucous-green, with a slight testaceous tinge, paler beneath. Vertex white. Palpi very short; third joint very minute. Antennæ deeply pectinated except towards the tips in the male, pubescent in the female. Abdomen crested. Wings with two deeper green parallel slightly undulating lines, which are slightly and in some parts indistinctly white-bordered. Fore wings hardly acute; exterior border very oblique. Hind wings prolonged hindward; exterior border slightly angular. Length of the body 4—5 lines; of the wings 10—12 lines.

Sarawak, Borneo. In Mr. Saunders' collection.

### 19. THALERA SENIALBA.

**Fœm.** *Saturate viridis, subtus alba; caput fuscescens; palpi breves, articulo 3o minimo; antennæ subserratæ; alæ dimidio exteriori albo; anticæ ex parte cinereo-fusæ, linea submarginali alba dentata, guttis marginalibus viridibus elongatis, margine exteriori subangulato; posticæ dilatatæ, punctis marginalibus nigris, margine exteriori subcaudato.*

**Female.** Deep green, white beneath. Head brownish. Palpi short; third joint very minute. Antennæ minutely serrated. Wings with nearly half the exterior part white, this hue most prevalent in the hind wings. Fore wings partly cinereous-brown; this hue occupying the whole of the base, and nearly half the breadth for three-fourths of the length; submarginal line white, dentated; marginal dots green, elongated; exterior border slightly angular. Hind wings prolonged hindward, extending much beyond the abdomen; exterior border distinctly angular, somewhat subcaudate; marginal

points black; under side with a black nearly apical spot, not corresponding with that of the fore wings, which is near the middle of the exterior border. Length of the body 5 lines; of the wings 12 lines.

Sarawak, Borneo. In Mr. Saunders' collection.

## 20. THALERIA CRISTIFERA.

*Fœm.* *Prasino-viridis, subtus fusca; palpi breves, articulo 3o minimo; abdomen fuscum, cristatum, lineis duabus macularibus viridibus; alæ cinereo fimbriatæ; anticæ fusco subconspersæ macula subcostali subapicali guttisque contiguis liturisque apud marginem interiorem fuscis, linea exteriori dentata cinerea postice furcata, costa cervina; posticæ productæ, cinereo suffusæ, fusco confertissime conspersæ, margine exteriori dentato angulato.*

*Female.* Grass-green, brown beneath. Palpi short; third joint very minute. Abdomen brown, with a row of green spots on each side, and with five high crests, which are more or less retracted towards the base. Wings with a cinereous fringe. Fore wings not broad, slightly and minutely speckled with brown, with an irregular brown subcostal and subapical spot, and with brown marks along the interior border; the spot accompanied by dots and including part of a dentate cinereous exterior line, which is forked hindward; costa fawn-colour; exterior border very oblique, hardly angular. Hind wings prolonged hindward, mostly overspread with cinereous, and with very numerous brown speckles, which are partly confluent; marginal lunules black; exterior border dentate, angular. Length of the body 6 lines; of the wings 14 lines.

Sarawak, Borneo. In Mr. Saunders' collection.

## Genus 21. AMAURINIA.

*Corpus gracile. Proboscis robusta. Palpi squamosi, subascendentes, frontem paullo superautes. Antennæ maris late pectinatæ triente apicali filiformi, fœminæ pubescentes. Abdomen læve. Pedes longi, graciles, glabri; tibie posticæ calcaribus quatuor longis. Alæ integræ, læves, concolores, lituris vix determinatis, fimbria discolori; posticæ abdomen superantes.*

*Amaurinia, Guen. Phal. i. 385.*

Body slender. Proboscis robust. Palpi squamous, slightly ascending, extending a little beyond the front. Abdomen smooth. Legs long, slender, smooth; hind tibiæ with four long spurs. Wings entire, smooth, alike in colour, slightly shining, not speckled; fringe not of the ground-colour; under side often tinged with red or violet. Hind wings extending beyond the abdomen. *Male*. —Antennæ broadly pectinated; apical third part abruptly filiform. *Female*. —Antennæ pubescent.

## ■ South America.

### 1. AMAURINIA HYPERYTHRARIA.

*Mas.* *Sordide glauco-viridis; frons cervina; alæ lineola marginali fusca, fimbria pallide flava; antica costa flava cinereo notata, linea undulata vix conspicua, puncto discali nigricante.*

*Amaurinia hyperythra*, Guen. *Phal.* i. 386, 619.

Brazil.

### 2. AMAURINIA NEUTRARIA.

*Fœm.* *Sordide viridis; frons cervina; vertex albus; alæ fimbria ochracea; antica puncto discali nigricante, lineis nonnullis rufescentibus tremulis parallelis vix distinctis; postica violaceo-nigro suffusæ, puncto discali lineisque quatuor obscurioribus indistinctis.*

*Amaurinia neutraria*, Guen. *Phal.* i. 386, 620, pl. 19, f. 5.

Brazil.

### 3. AMAURINIA SUBVIOLARIA.

*Fœm.* *Pallide cinerascens-viridis; caput fulvum, vertex albo; alæ nitentes, linea media denticulata vix conspicua, puncto discali albo, lineola marginali fusco-rufa, fimbria alba.*

*Amaurinia subviolaria*, Guen. *Phal.* i. 386, 621.

Cayenne.

## Asia.

### 4. AMAURINIA RUBROLIMBRARIA.

*Mas.* *Viridis; frons obscure rufa; alæ lineola marginali coccinea, fimbria alba; antica acuta, costa flavescens, margine exteriori recto; postica margine exteriori angulato.*

*Amaurinia rubrolimbraria*, Guen. *Phal.* i. 386, 618.

Ceylon.

## Australasia.

## 6. AMAURINIA OLERARIA.

**Fœm.** *Sericeo-viridis; abdomen album, basi viride; alæ fimbriis pallide flava, litura discali nulla; anticæ costa flavescens, lineis duabus viridescens-albis dentatis undulatis subparallelis; posticæ linea unica.*

*Amaurinia oleraria*, *Guen. Phal.* i. 385, 617.

Borneo.

## Uncertain Species.

## GEOMETRA? RHANIS.

*Viridis; alæ disco rufo nigro-marginato lineamque nigram undulatam includente; anticæ macula postica flavescens; postica linea undulata alba.*

*Phalæna-Geometra Rhanis*, *Cram. Pap. Exot.* ii. 34, pl. 119, f. B, C.

West Indies.

*Phalæna-Geometra Rhanisaria?* *Stoll, Cram. Pap. Exot.* v. 152, pl. 34, f. 2.

Surinam.

## GEOMETRA? VIRIDARIA.

*Ceruleo-viridis; alæ subangulatæ, macula discali rotundata nigricante, linea marginali nigra; anticæ subfalcata.*

*Phalæna-Geometra viridaria*, *Cram. Pap. Exot.* iv. 158, pl. 370, f. G.

Surinam.

## GEOMETRA? MARGINARIA.

*Glaucoviridis; alæ spatio marginali viridi, fimbria rosea.*

*Phalæna-Geometra marginaria*, *Stoll, Cram. Pap. Exot.* v. 156, pl. 34, f. 8.

Brazil.

## IODIS? IMMACULARIA.

**Mas.** *Viridis, I. putatoris statura, subtus albida; antennæ pectinatæ, apice setaceæ; caput supra fuscum; alæ posticæ valde angulatæ.*

*Phalæna immacularia*, *Fabr. Ent. Syst.* iii. 2, 131, 7.

*Cranquebar.*

IODIS? HERBARIA.

*Mas. Viridis*; caput album; abdomen cinereum; alæ puncto discali nigro.

*Phalæna-Geometra herbaria*, *Fabr. Ent. Syst.* iii. 2, 162, 118.

*West Indies.*

COMIBÆNA? VIRIDANA.

*Viridis*; alæ fascia saturatiore exteriori maculari fusco marginata, linea marginali nigra, fimbria cinerea; anticæ costa nigro punctata, fascia interiore saturatiore fusco marginata.

*Phalæna-Geometra viridana*, *Cram. Pap. Exot.* iv. 126, pl. 355, f. G.

*Surinam.*

COMIBÆNA? VIRIDARIA.

*Mas. Viridis*; antennæ usque ad apices pectinatæ; alæ amplæ, integræ, guttis nonnullis lineisque angulosis interruptis, lineaque submarginali nigris.

*Phalæna-Geometra viridana*, *Stoll, Cram. Pap. Exot.* v. 146, pl. 32, f. 5.

*Cape.*

Fam. 8. MECOCERIDÆ.

Corpus gracile. Proboscis longa. Palpi squamosi, caput superantes. Antennæ longissimæ, maris pectinatæ, læminæ gracillimæ. Thorax oblongus. Abdomen longum, maris utrinque carinatum, læminæ fusiforme. Pedes nudi, longissimi, gracillimi; tarsi longissimi; tibiæ posticæ quadricaræ. Alæ repandæ, concolores; anticæ oblongæ, apice acutæ; posticæ macula aut crista discali.

*Mecoceridæ*, *Guen. Phal.* i. 387.

Body slender. Proboscis long. Palpi very squamous, extending beyond the head. Antennæ very long, pectinated in the male, very slender in the female. Thorax somewhat oblong. Abdomen long, keeled on each side in the male, fusiform in the female. Legs smooth, very long and slender; tarsi very long;

hind tibiæ with two pairs of spurs, which are remote from each other. Wings very ample, alike in colour. Fore wings oblong, acute. Hind wings with a discal spot or crest.

The genus *Ametris*, which is included by Guenée with the two following genera in this family, is described, with the two species of which it is formed, in the fourth series of this Catalogue, page 6. Like the other genera of *Mecoceridæ* and like the *Palydæ*, it differs widely from the other *Geometrites*, and closely approaches some of the *Deltoidites* and of the *Pyralites*.

### Genus 1. MECOCERAS.

Proboscis longissima. Palpi ascendentes, caput paullo superantes; articuli 1us et 2us recurvi, ensiformes; 3us ovalis, tenuis. Pedes longi, graciles; tibiæ anticæ pilosæ; tarsi postici tibiis breviores. Alæ longæ, rotundatæ; anticæ apice acutæ; posticæ litam discali pupillata. *Mas.*—Oculi maximi. Antennæ pectinatæ, apice filiformes et uniciliatæ. *Fœm.*—Antennæ graciles, uniciliatæ.

*Mecoceras*, *Guen. Phal.* i. 388.

Proboscis very long. Palpi ascending, rising a little above the head; first and second joints recurved, ensiform; third ovate, small. Antennæ a little shorter than the costa of the fore wings. Abdomen very long. Legs long, slender; fore tibiæ pilose; hind tarsi shorter than the tibiæ. Wings long, rounded. Fore wings with acute tips; exterior border hardly convex, rather oblique. Hind wings with an ocellated discal mark. *Male.*—Eyes very large. Antennæ pectinated, filiform and ciliated on one side at the tips. Abdomen extending a little beyond the hind wings. *Female.*—Antennæ slender, ciliated on one side.

#### 1. MECOCERAS NITOCRIS.

*Viridescens-testacea aut cinerascens; caput rufum, vertice albo; alæ linea media obliqua diffusa fusca, lineis interiore et exteriori punctis nigris, lunulis marginalibus nigris albo marginatis; anticæ costa chalybæo conspersa; posticæ litura discali alba rufo marginata.*

*Phalæna-Geometra Nitocris*, *Cram. Pap. Exot.* iii. 148, pl. 275, f. A.

*Ametris Nitocritaria*, *Hübner. Exot. Schm.* ii. *Lep.* i. *Geom.* ii. *Ten.* i.; *Verz. Schm.* 303, 2922.

*Mecoceras Nitocritaria*, *Guen. Phal.* i. 389, 624.



- u—c. Parà. From Mr. Bates' collection.
- d. Venezuela. From Mr. Dyson's collection.
- e. Honduras. From Mr. Dyson's collection.
- f. Bogota. From Mr. Stevens' collection.
- g. Ega. From Mr. Bates' collection.
- h. Santarem. From Mr. Bates' collection.
- i. Villa Nova. From Mr. Bates' collection.
- j. ———? Presented by E. Doubleday, Esq.
- k. Brazil.
- l. ———?

## 2. MECOGERAS BITACTARIA.

**Mas.** *Pallide cinereo-flavescens, subviridescens; caput ferrugineo-rufum, flavo bipunctatum, vertice albo; abdomen nigro punctatum; alæ nigro conspersæ, fascia media nebulosa incompleta fusca, linea exterior punctulari nigra, punctis marginalibus ferrugineo-rufis; anticæ linea basali punctulari guttaque discali nigris; posticæ dentatæ, maculis duabus discalibus connexis albis rufo marginatis, macula apicali rufa, punctis marginalibus nonnullis albo marginatis.*

**Female.** Dull pale cinereous-yellow, with a greenish tinge. Head and palpi ferruginous-red; vertex white; front with two yellow points; second and third joints with yellow tips. Abdomen with a row of black points. Wings minutely black-speckled, with a middle nebulous incomplete brown band and with an exterior line of black points; marginal points ferruginous-red, much more attenuated in the fore wings than in the hind wings. Fore wings subfalcate, with a line of black points near the base, and with a black discal dot. Hind wings dentate, with two white connected red-bordered discal spots; a red apical spot, towards which the points are larger and more distinctly white-bordered. Length of the body 8—10 lines; of the wings 20—24 lines.

This species seems to connect the genera *Ametris* and *Mecoceras*, and may be distinguished from *M. Nitocris* by the markings and by the dentate hind wings.

- a. Jamaica. From Mr. Gosse's collection.
- b. ———? Presented by the Entomological Club.

## Genus 2. ALMODES.

Corpus sat robustum. Proboscis longa. Palpi porrecti, squamoso-hirsuti; caput paullo superantes; articulus 3us parvus, trun-

catus. Abdomen alas posticas non superans. Pedes glabri, longissimi, gracillimi. Alæ amplæ, elongatæ; anticæ vix acutæ, costa recta, margine exteriori convexo perobliquo; posticæ margine exteriori dentato. *Mas.*—Antennæ late pectinatæ, apice filiformes et crenulatæ. *Fæm.*—Antennæ simplices, graciles.

Almodes, *Guen. Phal. i. 389.*

Body moderately stout. Proboscis long. Palpi porrect, squamous-hirsute, extending a little beyond the head; third joint minute, truncate. Abdomen not extending beyond the hind wings. Legs smooth, very long and slender; spurs not long. Wings ample, elongated. Fore wings hardly acute; costa straight; exterior border convex, very oblique. Hind wings with the exterior border dentate. *Male.*—Antennæ broadly pectinated, filiform and crenulated at their tips. *Female.*—Antennæ bare, slender.

#### 1. ALMODES TERRARIA.

*Cinerascente-ferruginea; alæ nigro subconspersæ, lineis undulatis nigricantibus, linea media triplici, exteriori bene determinata, submarginali indistincta, lunulis marginalibus nigris albo marginatis, macula discali nigra.*

Almodes terraria, *Guen. Phal. i. 390, 625.*

a, b. St. Domingo. From Mr. Tweedie's collection.

c. St. Domingo. From Mr. Hearse's collection.

#### Fam. 9. PALLYADÆ.

Corpus gracile. Proboscis bene determinata. Palpi ascendentes; articuli 1us et 2us lati, compressi, squamosi; 3us sæpissime brevis. Antennæ sæpissime longissimæ, graciles. Thorax angustus. Abdomen longum, lineare. Pedes longi, graciles; tarsi longi; tibiæ posticæ quadricarætæ. Alæ amplæ, integræ, læves, lituris metallicis sæpe ornatæ, fimbria brevi.

Pallyadæ, *Guen. Phal. i. 391.*

Body slender. Proboscis conspicuous. Palpi ascending; first and second joints broad, compressed, squamous; third most often short. Antennæ slender, generally very long. Thorax narrow. Abdomen long, linear, hardly thicker in the female than in the male. Legs long, slender; tarsi long; hind tibiæ with two pairs of spurs. Wings ample, entire, smooth, often adorned with metallic lines; fringe short.

- A. Palporum articulus 3us distinctus. - 1. EUMELIA, *Dunc.*  
 B. Palporum articulus 3us indistinctus.  
 A. Alæ posticæ non angulatæ..  
 a. Pedes longi. - - - - 2. PLYAS, *Guen.*  
 b. Pedes non longi.  
 a. Alæ annulatæ. - - 3. OPHTHALMOPHORA, *Guen.*  
 b. Alæ non annulatæ. - - 5. CHRYSOCESTIS, *Hüb.*  
 B. Alæ posticæ angulatæ. - - - 4. BYSSODES, *Guen.*

## Genus I. EUMELIA.

Corpus gracile. Proboscis longa, robusta. Palpi subascendentes, subangulati; articulus 3us linearis, maris brevis, fœm. elongatus. Antennæ graciles, læves, longissimæ. Abdomen lineare, longissimum. Pedes longissimi, gracillimi; tibiæ anticæ subfasciculatæ; tibiæ anticæ maris intus pilosæ. Alæ amplæ, elongatæ; anticæ subfalcatæ; posticæ angulo interiore producto.

Ametris, p. *Hüb.* *Verz. Schm.* 303.

Eumelia, *Duncan*, *Nat. Hist. Exot. Moths*, 215. *Guen. Phal.* i. 391.

Body slender. Proboscis long, robust. Palpi slightly ascending and angular; third joint linear, much longer in the female than in the male. Antennæ smooth, slender and very long in both sexes. Abdomen linear, very long, not extending beyond the hind wings. Legs very long and slender; fore tibiæ with a small tuft; hind tibiæ of the male pilose on the inner side; spurs moderately long. Wings ample, elongate. Fore wings subfalcate; costa and exterior border hardly convex, the latter rather oblique. Hind wings with the interior angle prominent.

Eight species have been recorded with this genus, but seven of them are probably all one species, and cannot be divided into local subspecies. *E. fimbriata* differs from the others almost sufficiently to form a new genus.

## 1. EUMELIA ROSALIA.

*Lutea aut luteo-flava; alæ strigis confertissimis transversis rufescentibus, fasciis duabus rufescentibus aut purpurascentibus; antica linea interiore rufescente, costa nigro strigata; postica macula apicali flava.*

*Phalæna* - *Geometra Rosalia*, *Cram. Pap. Exot.* iv. 152, pl. 368, f. F.

*Phalæna rosata*, *Fabr. Ent. Syst.* iii. 2, 175, 164.

*Ametris punicearia*, *Hübner. Verz. Schm.* 303, 2924.

*Eumelea Rosaliata*, *Duncan, Nat. Hist. Exot. Moths*, 215, pl. 29, f. 4. *Guen. Phal.* i. 392, 626.

Amboina. Celebes.

a, b. Ceylon. Presented by Dr. Templeton.

c. Ceylon. From the Rev. J. Wenham's collection.

d. Ceylon.

e. Silhet. Presented by E. Doubleday, Esq.

f, g. Silhet. From the Rev. J. Stainforth's collection.

h. Ceram. From Madame Ida Pfeiffer's collection.

i. Celebes. From Madame Ida Pfeiffer's collection.

j. North Hindostan. From Mr. James' collection.

k. Java. From Mr. Henry's collection.

l—n. Hindostan. From the Entomological Society's collection.

o. Hindostan. From Archdeacon Clerk's collection.

p. China. Presented by the Rev. C. Kuper.

In some examples of this species the streaks and bands are diffuse and more or less confluent, and hide the ground-colour of the wings, and the apical spot of the hind wings is obsolete.

## 2. EUMELEA FELICIATA.

*Mas et foem. Minor, flava; pedes postici non pilosi; alæ roseo strigatæ, fasciis e strigis confluentibus; anticæ breviores, margine exteriori minus obliquo; posticæ lunulis marginalibus roseis.*

*Eumelea Feliciata*, *Guen. Phal.* i. 393, 628.

Silhet. Manilla.

## 3. EUMELIA LUDOVICATA.

*Croceo-flava; alæ rufæ conferte strigatæ, lineis duabus indistinctis purpurascente-roseis; anticæ maculis duabus flavis inter lineas; posticæ macula una flava inter lineas.*

*Eumelea Ludovicata*, *Guen. Phal.* i. 393, 628.

This species appears to be especially identical with *E. Rosalia*.  
Ceylon. Hindostan.

## 4. EUMELEA VULPENARIA.

*Ochracea ; alæ fasciis duabus roseis ; antica fascia 2a submargin-  
ali ; postica fascia 2a marginali.*

*Phalæna-Geometra Vulpenaria*, Cram. Pap. Exot. iv. 245, pl. 400,  
f. O, P.

*Phalæna gravidata*, Fab. Ent. Syst. iii. 2, 175, 163.

*Ametris Vulpenaria*, Hübn. Verz. Schm. 303, 2923.

*Eumelea Vulpenaria*, Guen. Phal. i. 393, 630.

Coromandel.

## 5. EUMELEA AURELIATA.

*Lutea aut luteo-flava ; alæ strigis transversis saturatioribus nigro  
punctatis, fasciis tribus macularibus latissime interruptis pur-  
pureis ; antica costa nigro notata.*

*Eumelea Aureliata*, Guen. Phal. i. 394, 631, pl. 22, f. 6.

a. Ceylon. Presented by Dr. Templeton.

b. Ceylon. From Mr. Stevens' collection.

c. Canara. Presented by the Secretary of the India Board.

## 6. EUMELEA FLORINATA.

*Vinoso-rosea, flavo subvaria ; antica oblongæ, margine exteriori  
subflexo, litura apicali flava nulla ; postica litura flava roseo  
strigata apud angulum interiorem.*

*Eumelea Florinata*, Guen. Phal. i. 392, 627.

Java.

## 7. EUMELEA HORTENSIATA.

*Cinerea ; alæ flavo-varia, nigro strigata, litura discali nigra, mar-  
gine pallide flavo ; antica costa apiceque flavis fusco strigatis,  
macula discali rotundata flava.*

*Eumelea Hortensiata*, Guen. Phal. i. 394, 632.

Borneo.

## 8. EUMELEA FIMBRIATA.

*Sordide ochracea ; corpus cinereo-fuscum ; alæ latæ, strigis transversis confertissimis fuscis ex parte confluentibus, spatio marginali plus minusve flavescente ; anticæ maculis duabus flavicentibus, 1a discali, 2a submarginali, margine exteriori subangulato ; posticæ subquadratæ, margine exteriori angulato.*

*Phalæna-Geometra fimbriata, Cram. Pap. Exot. iv. 236, pl. 398, f. N.*

*Eumelea Eugeniata, Guen. Phal. i. 394, 633.*

Amboina. Borneo.

a. Hindostan. From Archdeacon Clerk's collection.

## Genus 2. PALYAS.

Corpus gracile. Proboscis distincta. Palpi breves, ascendentes, obtusi ; articulus 3us indistinctus. Antennæ longæ, maris pubescentes aut subdentatæ, fœm. setacæ. Abdomen lineare, alas posticas non superans, maris apice obtusum. Pedes longi, graciles, glabri ; tibiæ posticæ calcaribus quatuor longis. Alæ integræ, rotundatæ, suboblongæ, lineis aut maculis metallicis sæpe ornatæ.

*Hypoplectis, p. et Chrysocestis, Hübn. Verz. Schm. 297, 307.*

*Palyas, Guen. Phal. i. 395.*

Body slender. Proboscis distinct. Palpi short, obtuse, applied to the head, not rising so high as the vertex ; third joint indistinct. Antennæ long, pubescent or slightly dentate in the male, setaceous in the female. Abdomen linear, not extending beyond the hind wings, obtuse at the tip in the male. Legs long, slender, smooth ; hind tibiæ with four long spurs. Wings entire, rounded, slightly oblong, often adorned with metallic lines or spots.

## 1. PALYAS PERTEXTARIA.

*Ochracea ; alæ nigro confertissime strigatæ.*

*Hypoplectis pertextaria, Hübn. Zutr. f. 239, 240 ; Verz. Schm. 297, 2875.*

*Palyas pertextaria, Guen. Phal. 394, 634.*

Guiana.

2. *PALYAS AURA*.

*Crocea ; alæ linea marginali guttulari aurata ; anticæ gutta tumida lineaque exteriori subcostalibus lineaque exteriori obliqua auratis.*

*Phalæna-Geometra Aura*, *Cram. Pap. Exot.* i. 85, pl. 53, f. F.

*Phalæna Aura*, *Fabr. Ent. Syst.* iii. 2, 174.

*Chrysocestis auraria*, *Hübner. Zutr.* f. 591 ; *Verz. Schm.* 307, 2962.

*Palyas aurata*, *Guen. Phal.* i. 396, 636.

a. Santarem. From Mr. Bates' collection.

b, c. Para.

d. Ega. From Mr. Bates' collection.

Country unknown.

3. *PALYAS PERLIMBATA*.

*Mas. Flava ; antennæ subdentatæ ; alæ rufescente-cinereo conferte strigatæ, spatio exteriori non strigato lineam rufescentem et lineam plumbeam nigro punctatam includente, macula discali vaga indistincta.*

*Palyas perlimbata*, *Guen. Phal.* i. 396, 635.

Genus 3. *OPHTHALMOPHORA*.

Corpus sat gracile. Proboscis distincta. Palpi breves, lati, squamosi, contigui, articulo 3o vix conspicuo. Antennæ maris pectinatæ aut pubescentes. Abdomen non longum. Pedes vix graciles, non longi ; tibiæ posticæ calcaribus quatuor longis. Alæ integræ, velutinæ, rotundatæ, sat spissæ ; anticæ suboblongæ, apice quadratæ ; posticæ rotundatæ, oculo metallico ornatæ.

*Opisthoxia*, *Hübner. Verz. Schm.* 308.

*Ophthalmophora*, *Guen. Phal.* i. 397.

Body rather slender. Proboscis distinct. Palpi short, broad, squamous, contiguous ; third joint hardly visible. Antennæ of the male pectinated or pubescent. Abdomen shorter than in other genera of this family, not extending beyond the hind wings. Legs hardly slender, not long ; hind tibiæ with four long spurs. Wings entire, velvety, rather dense. Fore wings oblong, quadrate at the tips ; costa straight ; exterior border slightly oblique. Hind wings rounded, adorned with a metallic ocellus.

- A. Alæ albæ. - - - - - amabilis, *Cram.*  
 B. Alæ lutescentes.  
   A. Alæ posticæ disco medio sabuloso. - pamphilaria, *Guen.*  
   B. Alæ posticæ disco toto sabuloso. - - - Lyllaria, *Guen.*  
 C. Alæ anticæ obscuræ.  
   A. Alæ posticæ flavæ aut luteæ.  
     a. Alæ posticæ linea submarginali interrupta. Alectaria, *Guen.*  
     b. Alæ posticæ linea submarginali integra. - Elysiata, *Walk.*  
   B. Alæ posticæ dimidio exteriori luteo. - Danacata, *Walk.*  
   C. Alæ posticæ obscuræ.  
     a. Alæ anticæ costa lutescente. - - - Corinnaria, *Guen.*  
     b. Alæ anticæ costa obscura. - - - Formosante, *Cram.*

### 1. OPHTHALMOPHORA ALECTARIA.

**Mas.** *Fusco-cinerea; antennæ serratæ; alæ anticæ costa pallide, margine exteriori marginisque dimidio interrupte pallide flavis, macula discali ovata flava; posticæ flavæ, fusco conspersæ, basi cinereæ, ocello nigro aureo-pupillato fusco-marginato, linea submarginali aurata antice integra postice e strigis angulum interiorem attingente.*

*Ophthalmophora alectaria*, *Guen. Phal. i. 397, 639.*

Brazil?

### 2. OPHTHALMOPHORA PAMPHILARIA.

**Mas.** *Lutescens; antennæ vix pubescentes; alæ subtus pallide cervinæ subconspersæ, linea alba subarcuata intus fusco marginata; anticæ linea interiore strigaeque discali; posticæ disco medio rufescente sabuloso, linea reniformi interrupta submarginali pallide aurata, ocello discali nigro tumido aureo-squamoso, puncto postico aurato nigro-marginato.*

*Ophthalmophora pamphilaria*, *Guen. Phal. i. 398, 640.*

Brazil?

### 3. OPHTHALMOPHORA LYLLARIA.

**O.** *pamphiliaris simillima; alæ disco toto rufescente conspersæ, subtus pallide lutescentes; anticæ umbra flexuosa umbræque interiore saturatioribus, linea nulla arcuata, litura reniformi*



*incompleta, apice subtus rufescente ; postica striga basali recta.*

*Ophthalmophora* Lyllaria, *Guen. Phal.* i. 398, 641.

Brazil ?

#### 4. OPHTHALMOPHORA CORINNARIA.

*Fuscescente-cinerea ; alæ anticæ costa margineque interiore lutescentibus, linea exteriori pallida recta non obliqua, macula costali trigona lutescente ; postica cinerea porphyrio conspersa, fasciola basali pallida recta subargentea, linea marginali postica plumbea, ocello discali antico metallico lutescente-marginato.*

*Ophthalmophora* Corinnaria, *Guen. Phal.* i. 398, 642, pl. 11, f. 10.

Brazil.

#### 5. OPHTHALMOPHORA AMABILIS.

*Alba ; alæ anticæ elongatæ, vitta lata antica nigro-fusca ; postica linea submarginali iridescente aurea, guttis duabus tumidis auratis, 1a discali, 2a auratu.*

*Phalæna* amabilis, *Cram. Pap. Exot.* ii. 24, pl. 112, f. G.

*Opisthoxia* amabilaria, *Hübner. Verz. Schm.* 308, 2966.

*Ophthalmophora* amabiliata, *Guen. Phal.* i. 399, 643.

Surinam.

a. Parà. From Mr. Bates' collection.

#### 6. OPHTHALMOPHORA FORMOSANTE.

*Cinereo-rufescens ; alæ posticæ argenteo marginatæ, fimbria crocea apice cinerea, maculis duabus chalybeis albido marginatis, 1a discali, 2a minore.*

*Phalæna-Geometra* Formosante, *Cram. Pap. Exot.* ii. pl. 147, f. G.

*Opisthoxia* formosaria, *Hübner. Verz. Schm.* 308, 2967.

*Ophthalmophora* Formosantata, *Guen. Phal.* i. 399, 644.

a, b. Santarem. From Mr. Bates' collection.

## 7. OPHTHALMOPHORA ELYSIATA.

**Mas.** *Ochracea*; *corpus rufescente-fuscum*; *ala antica* with *incisa latissima rufescente-fusca*, *fascia exterior* *argentea arcuata abbreviata interrupta*; *postica linea submarginali argentea*, *guttis duabus chalybæis tumidis*, *1a discali albido marginata*, *2a postica parva*.

**Male.** Orange. Body reddish brown. Fore wings with a very broad reddish brown stripe, which has three more or less deep notches in front and two on the hind side; an exterior curved silvery band, which is abbreviated at each end and interrupted in the middle. Hind wings with a submarginal silvery line, which is parallel to the exterior border; two tumid chalybeous dots; the first in the exterior part of the disk, whitish-bordered, larger than the other, which is contiguous to the submarginal line. Length of the body 7 lines; of the wings 14 lines.

This species differs from *O. alectaria* in the submarginal line of the hind wings, from *O. pamphilaria* and *O. Lyllaria* in the colour of the fore wings, and from *O. Corinnaria* in the colour of the hind wings and in the hinder metallic dot by which they are adorned.

*a, b.* Ega. From Mr. Bates' collection.

## 8. OPHTHALMOPHORA DANARATA.

**Mas et fœm.** *Cinereo-fusca*, *subtus pallide testacea*; *caput luteum*, *albo-marginatum*; *alæ anticæ apud costam angulatim luteæ*, *fasciis duabus arcuatis obscure fuscis*, *spatio apud angulum anteriorem luteo*; *posticæ dimidio exteriori luteo lineas duas flavascentes duasque auratas guttasque quatuor auratas tumidas albido marginatas includente*.

**Male and female.** Cinereous-brown, pale testaceous beneath. Head luteous, white-bordered behind. Fore wings with the costa broadly bent, irregularly luteous; this hue forming two angles in the darker part, in which there are two darker brown curved bands; space about the interior angle luteous. Hind wings with the exterior half luteous; this hue contains two pale yellow lines (of which the inner one is short and the outer one is sometimes macular), and is adorned with two curved gilded lines (the inner one short, the outer one parallel to the exterior border) and with a row of four gilded tumid whitish-bordered more or less contiguous spots. Length of the body 5—6 lines; of the wings 14—16 lines.

This species is sufficiently distinguished from all the preceding *Ophthalmophora* by the row of tumid metallic dots on the hind wings.

♂. b. Santarem. From Mr. Bates' collection.

#### Genus 4. BYSSODES.

*Corpus gracillimum. Proboscis mediocris. Palpi ascendentis, squamosi; articulus 3us truncatus, indistinctus. Antennæ non longissimæ, maris subpectinatæ apice simplicis. Abdomen maris lineare, longissimum, valvis apicalibus oblongis pilosis. Pedes longi, graciles; tibiæ posticæ calcaribus quatuor longis. Alæ angustæ, tennes, integræ, lineis metallicis; anticæ costa apicem versus valde arcuata; posticæ angustæ, angulatæ.*

*Phrygionis, Hübn. Verz. Schm. 307.*

*Byssodes, Guen. Phal. i. 399.*

Body very slender. Proboscis moderately long. Palpi ascending, squamous; third joint truncated, indistinct. Antennæ shorter than in other genera of this family; those of the male very slightly pectinated, except towards the tips. Abdomen of the male linear, very long, with oblong pilose apical valves. Legs long, slender; hind tibiæ with four long spurs. Wings narrow, delicate, entire, with metallic lines. Fore wings with the costa much curved towards the tip. Hind wings narrow; exterior border convex; interior border fringed.

#### 1. BYSSODES CULTARIA.

*Cinereascens; alæ anticæ linea transversa basali argentea nigro marginata, fasciis interiore et exteriori lutescentibus argenteo, nigroque marginatis; posticæ fascia exteriori, lituris apud marginis exterioris angulum rubris.*

*Phrygionis cultaria, Geyer. Hübn. Zutr. f. 751, 752; Verz. Schm. 307, 2959.*

*Byssodes cultaria, Guen. Phal. i. 400, 646.*

Cuba.

#### 2. BYSSODES ARGENTATA.

*Pallidissime cervina aut purpurascens-cinerea; alæ linea media argentea recta non obliqua, fascia exteriori contigua alba argenteo marginata; anticæ lineis duabus guttisque costalibus basalibus argenteis.*

*Phalæna argentata*, *Drury, Exot. Ins.* ii. 25, pl. 14, f. 2.

*Byssodes argentata*, *Guen. Phal.* i. 401, 648.

Jamaica. Rio Janeiro.

a. Porto Rico. From Mr. Cuming's collection.

b. ———? From Mr. Milne's collection.

### 3. BYSSODES PRIVIGNARIA.

*B. paradoxatæ affinis*; *alæ cinereo-fuscae, fascia flava equali extus metallico marginata; antica margine exteriori subundulato; posticae marginis exterioris angulo valde rotundato, punctis apud angulum duobus auratis, litura contigua rufa.*

*Phalæna decorata?* *Fabr. Ent. Syst.* iii. 2, 173, 158.

*Byssodes privignaria*, *Guen. Phal.* i. 401, 649.

Martinico.

### 4. BYSSODES PARADOXATA.

*Mas. Pallidissime cinerascens; alæ anticae fasciis duabus sordide olivaceo-flavis, guttis interioribus aurato-chalybæis nigro marginatis, fascia 1a parva subundulata, 2a recta angusta antice dilatata strigam discalem includente postice albo marginata; posticae fascia exteriori postice flexa strigis nigris divinis plumbeo marginata, macula apud angulum marginalem lateritis chalybæo-notato.*

*Byssodes paradoxata*, *Guen. Phal.* i. 400, 645.

Brazil?

### 5. BYSSODES POLITA.

*Pallide cervina; alæ fascia recta flava aureo marginata; anticae fascia basali flava aureo marginata, lineis apicalibus subcostalibus aureis; posticae linea submarginali aurea.*

*Phalæna-Geometra Polita*, *Cram. Pap. Exot.* iii. 152, pl. 276, f. F; v. 143, pl. 31, f. 4.

*Byssodes politulata*, *Guen. Phal.* i. 400, 647.

Surinam.

●  
6. BYSSODES APPROPRIATA.

**Mus.** *Rufescens-cinerea*; vertex et thoracis margo anticus alba; alæ anticæ acutæ fasciis duabus luteis rectis parallelis non obliquis, lineis duabus punctisque basalibus et costalibus argenteis tumidis; posticæ fascia 2a ochracea flexa, linea interiore postica argentea tumida interrupta, linea exteriori purpurascens-argentea, linea marginali antica argentea, macula apud angulum chalybæo-nigra.

**Male.** Reddish cinereous, pale cinereous beneath. Vertex and fore border of the thorax white. Fore wings acute, with two straight upright parallel luteous bands, which are bordered with tumid silvery lines on the inner side; some silvery points at the base and along the costa as far as the second band; fringe white. Hind wings with the second band orange, continued straight from the fore wings, bent inward opposite the angle of the exterior border, its hind part bordered on the inner side with an interrupted tumid silvery line, its outer side bordered by a purplish silvery line, which is not tumid; exterior border with a silvery line on the inner side in front, and with a well-defined angle, which contains a chalybeous black spot; fringe luteous. Length of the body 8 lines; of the wings 18 lines.

This species seems to be most allied to *B. paradoxata* and to *B. cultaria*, but it may be distinguished from the former by the band of the fore wings, which is not divided by black streaks, and from the latter by the bands of the fore wings, which are not bordered with black.

a. Mexico. Presented by E. Doubleday, Esq.

Genus 5. CHRYSOCESTIS.

Corpus sat gracile. Proboscis brevis, tenuis. Palpi porrecti, caput paullo superantes; articulus 3us parvus, conicus. Antennæ maris subsetulosæ. Pedes graciles, læves, non longi; tibiæ posticæ calcaribus quatuor longis. Alæ albæ, iridescentes, marginatæ.

*Chrysocestis*, p., Hübn. Verz. Schm. 307.

*Palyas*, p., Guen.

Body rather slender. Proboscis short, slender. Palpi porrect, extending a little beyond the head; third joint conical, not more than one-fourth of the length of the second. Antennæ of the male

minutely and thickly setulose. Legs slender, smooth, not long; hind tibiæ with four long spurs. Wings white, bordered with brilliant iridescent reflections. Hind wings extending beyond the abdomen.

The genus *Palyas*, as it is here limited, probably requires further division, and the two following species, which represent the genus *Chrysocestis*, differ much from *P. Aura*, the type of *Palyas*, and should perhaps be removed from the *Palyadæ* to the *Acidalidæ*.

### 1. CHRYSOCESTIS FIMBRIARIA.

*Mas?* *Candida*; *caput et thoracis margo anticus ochraceus*; *alæ semihyalinæ, fascia marginali lata ochracea intus argentea marginata lineam auratam tumidam interruptam includent.* *Fœm?*—*Alæ lineis duabus ferrugineis transversis indistinctis incompletis, fascia marginali angusta non marginata.*

*Phalæna-Geometra fimbriaria, Cram. Pap. Exot. iv. 112, pl. 348, f. C.*

*Palyas imperata, Guen. Phal. i. 396, 637.*

Surinam.

*Male?* Pure white. Head and fore border of the thorax ochraceous. Wings semihyaline, with a broad ochraceous marginal band, which is bordered on the inner side by a silvery line, and includes near the fringe an interrupted tumid gilded line; fringe white. *Female?*—Wings with two indistinct and incomplete transverse ferruginous lines; marginal band limited to the space between the gilded line and the fringe. Length of the body  $3\frac{1}{2}$ —4 lines; of the wings 10 lines.

*a.* Brazil. From Mr. Mornay's collection.

*b, c.* Honduras. From Mr. Dyson's collection.

*d—f.* Pará. From Mr. Bates' collection.

### 2. CHRYSOCESTIS INSTITATA.

*Mas.* *Alba*; *caput et thorax anticus fusca*; *alæ iridescentes, argenteo micantes, cinerascens-fusco marginalæ*; *antica costæ lineisque tribus interruptis ochraceis nigro notatis*; *postice margine interiore cupreo-maculato postice tumido plicato pilis verticillatis ornato.* *Fœm.*—*Alæ non argenteæ, fusciscenti-conspersæ, lineis bene determinatis, punctis marginalibus nigris elongatis.*

*Phalæna-Pyralis fimbrialis*, *Stoll, Cram. Pap. Exot.* v. 74, pl. 16, f. 4.

*Palyas institata*, *Guen. Phal.* i. 397, 638.

Surinam.

*Male.* White. Head and fore part of the thorax brown. Wings iridescent, brilliantly silvery, especially the hind wings; exterior border cinereous-brown. Fore wings with an ochraceous black-marked costa; three irregular interrupted ochraceous black-marked lines, of which the first extends by two black points to the hind wings; these latter have an elongated cupreous spot on the interior border, of which the hinder part is inflated and recurved, and furnished with verticillate hairs. *Female.*—Wings not silvery, with brownish speckles, and with black elongated marginal points; lines much more complete than those of the male, and equally apparent on the hind wings, the latter with the interior border simple. Length of the body  $3\frac{1}{2}$ — $4\frac{1}{2}$  lines; of the wings 10—12 lines.

a—c. Ega. From Mr. Bates' collection.

d, e. Parâ. From Mr. Bates' collection.

### 3. CHRYSOCËSTIS BISIGNATA.

*Fœm.* Candida; caput rufescens; thoracis margo anticus ferrugineo-fuscus; alæ iridescentes, lineis duabus indistinctis guttularibus testaceis subauratis, punctis marginalibus nigris elongatis; anticæ costa aurata, linea interiore valde interrupta, litura apud marginem interiorem magnam tumidam nigram albo signatam.

*Female.* Pure white. Head reddish. Fore part of the thorax ferruginous-brown. Wings iridescent, with two indistinct guttular testaceous slightly gilded lines, of which the first one is entire in the hind wings; exterior border with elongated black points. Fore wings with a gilded costa, and with an interior much interrupted line; a large tumid black and white mark on the interior border adjoining the middle line. Wings beneath without lines, but with a brown marginal band. Length of the body 6 lines; of the wings 16 lines.

a. Santarem. From Mr. Bates' collection.

## Fam. 10. EPHYRIDÆ.

Statura parva. Proboscis mediocris. Palpi bene determinati: articulus 3us filiformis, valde distinctus, sæpe longus. Antennæ maris pectinatæ, apice filiformes. Abdomen scem. plus minusve depressum. Pedes longiusculi; tibiæ posticæ bicalcaratæ. Alæ extensæ, concolores, lituris non diversis, lineis sæpissime duabus punctularibus remotis ocelloque discali.

Ephyridæ, *Guen. Phal. i. 402.*

Size small. Proboscis moderately long. Palpi conspicuous; third joint filiform, very distinct, often long. Antennæ of the male generally pectinated to three-fourths of the length, filiform from thence to the tips. Abdomen of the female more or less depressed. Legs rather long; hind tibiæ with only one pair of spurs. Wings extended in repose, alike in colour, and with like markings; the latter generally consisting of two remote lines of points and of a discal ocellus.

## A. Alæ posticæ læves.

## A. Antennæ maris pectinatæ.

A. Palpi articulo 3o non longo. - - 3. EPHYRA, *Dup.*

B. Palpi articulo 3o longissimo. - - 4. ANISODES, *Guen.*

B. Antennæ maris non pectinatæ. - - 1. NUMIA, *Guen.*

B. Alæ posticæ fasciculis aut pilis erectis ornatæ.

2. CYPHOPTERYX, *Guen.*

## Genus 1. NUMIA.

Corpus sat robustum. Palpi oblique ascendentes, caput sat superantes, apice contigui; articulus 2us longus, squamosus, subrectus; 3us tenuis, filiformis, subflexus. Antennæ maris tenues, submoniliformes, subtus subincisæ. Thorax longiusculus sat latus. Abdomen maris conicum, velutinum, scem. crassum. Alæ spissæ, velutinæ; anticæ acutæ; posticæ angulo interiore obtuso, margine exteriori inciso.

Numia, *Guen. Phal. i. 403.*

Body rather robust. Palpi obliquely ascending, extending considerably beyond the head, contiguous at the tips; second joint long, squamous, thick, nearly straight; third slender, filiform, slightly bent. Antennæ of the male slender, submoniliform, slightly notched



beneath. Thorax rather large. Abdomen conical and slightly velvety in the male, thick in the female. Wings dense, velvety. Fore wings acute. Hind wings with a notch near the obtuse interior angle.

This genus is inserted here in conformity with Guenée's arrangement, but it appears to belong to the *Geometridæ* and to form a section of the genus *Geometra*, and the two following species are closely allied to the four first West Indian species described in this Catalogue.

### West Indies.

#### 1. NUMIA TEREBINTHARIA.

**Mas.** *Pallide pistacio-viridis, subtus flava; abdomen apice rufescens; alæ linea indistincta ferruginea, puncto discali albo minimo ferrugineo-cincto, margine subtus lato ferrugineo; anticæ puncto subcostali strigaeque subapicali ferrugineis.*

*Numia terebintharia*, Guen. *Phal.* i. 403, 650.

Haiti.

### Country unknown.

#### 2. NUMIA BUXARIA.

**Fœm.** *Sordide flavescens; alæ punctis guttisque nonnullis fuscis, gutta discali ferruginea albo punctata; anticæ macula marginali maxima semilunari carneo aut cinereo-ferruginea, simbria rufescente varia.*

*Numia buxaria*, Guen. *Phal.* i. 403, 651, pl. 18, f. 8.

### Genus 2. CYPHOPTERYX.

Palpi breves, ad frontem applicati. Antennæ maris fasciculis densis munitæ. Thorax rotundatus. Abdomen subdepressum, apice conicum acutum. Alæ læves, spissæ; posticæ subtus pilis erectis aut fasciculo ornatæ.

*Cyphopteryx*, Guen. *Phal.* i. 404.

Palpi short, applied to the front. Antennæ of the male furnished with tufts of thick-set hairs. Thorax rounded. Abdomen slightly depressed, terminated in both sexes by a short acute cone. Wings smooth, stout. Hind wings adorned beneath with raised hairs, or with a large tuft.

## 1. CYPHOPTERYX INCURVARIA.

**Mas.** *Viridis; alæ subtus vinoso-carneæ; anticæ costa lutea, lineis tribus indistinctis punctoque discali obscuris; posticæ bilineatæ, puncto discali albo, margine exteriori plicato, subtus villosæ.*

*Cyphopteryx incurvaria, Guen. Phal. i. 404, 652.*

Brazil.

## 2. CYPHOPTERYX FISSARIA.

**Mas.** *Carneo-cinerea; alæ lineis duabus aut tribus saturatioribus, 3a punctiformi; anticæ puncto discali cinereo; posticæ puncto discali albo argenteo sericeo, margine exteriori subquadrato fissi dense fasciculato.*

*Cyphopteryx fissaria, Guen. Phal. i. 404, 653.*

Cayenne.

## Genus 3. EPHYRA.

**Corpus gracile. Caput parvum, retractum. Palpi graciles; articulus 3us filiformis, distinctissimus, non longus. Antennæ maris pectinatæ, apices versus filiformes. Abdomen subdepressum, apice conicum acutum. Pedes graciles; tibie posticæ glabræ. Alæ læves, integræ, fimbria longa; anticæ acutæ; posticæ margine exteriori subflexo.**

*Cosymbia, Leucophthalmia, Codonia et Adactylotis, Hübn. Verz. Schm. 303, 304.*

*Cabera, p. Treit.*

*Ephyra, Dup. Lep. iv. 108. Guen. Phal. i. 405.*

**Body slender. Head small, deep set. Palpi slender; third joint filiform, very distinct, not long, alike in both sexes. Antennæ of the male pectinated to half or to three-fourths of the length. Abdomen slightly depressed, terminated in both sexes by a short acute cone. Legs slender; hind tibie bare, with four long spurs. Wings smooth, entire; fringe long. Fore wings acute. Hind wings with the exterior border slightly bent.**

## Europe.

## A. Alæ cinerascens.

## A. Alæ umbra nulla submarginali.

## A. Alæ rufescente-cinereæ.

a. Alæ umbra nulla media. - - pupillaria, Hübn.

b. Alæ umbra media. - - orbicularia, Hübn.

## B. Alæ cinereæ.

a. Alæ longiores. - - punctaria, Linn.

b. Alæ breviores. - - subpunctaria, Zell.

B. Alæ umbra submarginali. - - pendularia, Linn.

## B. Alæ luteæ aut testaceæ.

## A. Alæ disco non ochraceo.

## A. Alæ anticæ non falcatæ.

## a. Alæ luteæ.

i. Alæ lineis punctularibus. - - gyraria, Hübn.

## ii. Alæ lineis integris.

\* Alæ conspersæ. - - trilinearia, Borrk.

\*\* Alæ non conspersæ. - - strabonaria, Zell.

## b. Alæ testaceæ.

i. Alæ lineis punctularibus. - - poraria, Linn.

ii. Alæ lineis integris. - - omicronaria, Wien. Verz.

B. Alæ anticæ subfalcatæ. - - nolaria, Hübn.

B. Alæ disco ochraceo. - - albiocellaria, Hübn.

## 1. EPHYRA PUPILLARIA.

*Rufescente-cinerea ; alæ nigricante conspersæ, lineis duabus punctularibus nonnunquam obsoletis, puncto discali albo nigro-violaceo cincto, aut rufescente vix cincto, aut rufo minimo, aut nullo.*

*Geometra pupillaria, Hübn. Geom. pl. 13, f. 69.*

*Codonia pupillaria, Hübn. Verz. Schm. 303, 2918.*

*Cabera pupillaria, Treit. Schm. vi. 1, 364, 11.*

*Ephyra pupillaria, Dup. Lep. v. 30, pl. 172, f. 2. Boisd. Ind. 220, 1826. Herr.-Sch. Eur. Schm. iii. 31, 90. Leder. Schm. 94. De Lah. Schm. 59. Guen. Phal. i. 408, 662.*

*Ephyra gyraria, Dup. Lep. v. 31, pl. 172, f. 3. Boisd. Ind. 220, 1827.*

## South Europe.

## 2. EPHYRA GYRARIA.

*Lutea; alæ conspersæ, linea nigricante diffusa costam versus obsoleta, puncto discali albo nigro marginato, linea exteriori nigra punctulari; posticæ linea interiore antice obsoleta.*

*Geometra gyrata*, Hübn. *Geom.* pl. 84, f. 434.

*Codonia gyrata*, Hübn. *Verz. Schm.* 303, 2916.

*Cabera gyraria*, Treit. *Schm.* vi. 1, 366, 12.

*Ephyra gyraria*, Herr.-Sch. *Eur. Schm.* iii. 31, 89. *De Lah. Schm.* 58. Guen. *Phal.* i. 409, 663.

Dalmatia.

## 3. EPHYRA PORARIA.

*Testacea; alæ nigro et rufescente conspersæ, lineis duabus punctularibus, annulo discali albo-pupillato punctisque marginalibus elongatis nigris, fascia media tenui nebulosa rufescente.*

———, Albin, *Ins.* pl. 50, f. 85. Wilkes, *Pap.* 1749, pl. 82. *De Vill. Ent. Linn.* ii. 332, 500.

*Phalæna-Geometra porata*, Linn. *Syst. Nat.* i. 2, 866, 233. Gmel. *ed. Syst. Nat.* i. 5, 2459, 233.

*Phalæna porata*, Fabr. *Sp. Ins.* ii. 256, 85; *Mant. Ins.* ii. 200, 129; *Ent. Syst.* iii. 2, 173, 159.

*Geometra punctaria*, Wien. *Verz.* 107, 2. *Ill. N. Ausg. dess.* i. 424, 2. Hübn. *Geom.* pl. 13, f. 67. Sepp, *Schm.* iv. pl. 10, f. 9.

*Geometra ocellaria*, Haw. *Lep.* 312.

*Codonia punctaria*, Hübn. *Verz. Schm.* 303, 2917.

*Cabera poraria*, Treit. *Schm.* vi. 1, 356, 6.

*Ephyra poraria*, Dup. *Lep.* v. 28, pl. 172. Steph. *Ill. Brit. Haust.* iii. 200. Boisd. *Ind.* 220, 1825. Herr.-Sch. *Eur. Schm.* iii. 31, 88. *De Lah. Schm.* 57. Guen. *Phal.* i. 410, 664.

a—r. England. From Mr. Stephens' collection.

s—v. England. From Mr. Foxcroft's collection.

w—z. England.

## 4. EPHYRA PUNCTARIA.

*Cinerascente-albida; alæ nigro subsabulosæ, lineis duabus punctularibus, annulo discali punctisque marginalibus elongatis nigris.*

———, Albin, *Ins.* pl. 49, f. 82. Wilkes, *Pap.* 1749, pl. 82. Réaum. *Ins.* ii. 365, pl. 29, f. 1—4. *De Vill. Ent. Lin.* ii. 291, 401.

*Phalæna-Geometra punctaria*, Linn. *Syst. Nat.* i. 2, 859, 200; *Faun. Suec.* 1250. Gmel. ed. *Syst. Nat.* i. 5, 2448, 200. Clerck, *Icon.* pl. 5, f. 11.

*Phalæna punctaria*, Fabr. *Sp. Ins.* ii. 242, 7; *Mant. Ins.* ii. 185, 9; *Ent. Syst.* iii. 2, 132, 11. Knoch, *Beitr.* i. 13, pl. 1, f. 4—6. Bork. *Eur. Schm.* v. 258, 112. Esp. *Schm.* v. 44, pl. 6, f. 57; pl. 7, f. 1, 2. Mull. *Faun. Frid.* 49, 429; *Zool. Dan. Prodr.* 125, 1437. Rossi, *Faun. Etrusc.* ii. 191, 1155.

*Geometra punctaria*, Hübn. *Geom.* f. 574. Sepp. *Schm.* iv. pl. 10, f. 1—8. Haw. *Lep.* 313. Frey. *Beitr.* pl. 54. f. 1.

*Cabera punctaria*, Treit. *Schm.* vi. 1, 352, 5.

*Ephyra punctaria*, Dup. *Lep.* v. 25, pl. 171, f. 8. Steph. *Ill. Brit. Haust.* iii. 201. Eversm. *Faun. Volg.-Ural.* 395. Boisd. *Ind.* 220, 1823. Herr.-Sch. *Eur. Schm.* iii. 30, 83. De Lah. *Schm.* 53. Guen. *Phal.* i. 410, 665.

*Geometra subangularia*, Haw. *Lep.* 313.

*Phalæna communifasciata*, Donov. *Brit. Ins.* xiii. pl. 456.

*a—w.* England. From Mr. Stephens' collection.

*x, y.* England. From Mr. Foxcroft's collection.

*z—bb.* England.

*cc—dd.* Europe. From M. Becker's collection.

### 5. EPHYRA SUBPUNCTARIA.

*E. punctariæ affinis, minor, pallidior; alæ breviores, minus conspersæ, angulis minus determinatis, lineis duabus rufescentibus, linea exterior punctulari.*

*Ephyra subpunctaria*, Zell. *MSS.* Herr.-Sch. *Eur. Schm.* Sup. 69, pl. 67, f. 415. Leder. *Schm.* 95. Guen. *Phal.* i. 411, 666.

Tuscany.

### 6. EPHYRA STRABONARIA.

*E. trilinearæ affinis, flavescens-carnea; alæ non conspersæ, lineis duabus denticulatis e punctis nigris ligatis, umbra media bene determinata; posticæ puncto discali albo ocellato.*

*Ephyra strabonaria*, Zeller, *Zeit. Breslau*, No. 18. Guen. *Phal.* i. 411, 667.

Germany.

## 7. EPHYRA TRILINEARIA.

*Lutea; abdomen nigro conferte conspersum; alæ nigro subconspersæ, lineis duabus purpurascente nigricantibus, 1a bræ determinata, 2a tenui subundulata nigro punctata, punctis marginalibus nigris elongatis, puncto discali elongato albo.*

*Geometra trilinearia*, Bork. Eur. Schm. v. 502, 253.

*Geometra linearia*, Hübn. Geom. pl. 13, f. 68.

*Adactylotis linearia*, Hübn. Verz. Schm. 304, 2930.

*Cabera trilinearia*, Treit. Schm. vi. 1, 367, 13.

*Ephyra trilinearia*, Dup. Lep. v. 23, pl. 171, f. 7. Steph. Ill. Brit. Haust. iii. 201. Boisd. Ind. 220, 1822. Herr.-Sch. Eur. Schm. iii. 30, 82. De Lah. Schm. 52. Guen. Phal. i. 411, 668.

a—k. England. From Mr. Stephens' collection.

l—n. England.

## 8. EPHYRA NOLARIA.

*Lutea; alæ lineis duabus punctularibus nigris, 2a magis determinata, annulo discali nigro subcæco; anticæ subfalcatæ.*

*Geometra nolaria*, Hübn. Geom. pl. 63, f. 327.

*Cosymbia nolaria*, Hübn. Verz. Schm. 302, 2910.

*Ephyra nolaria*, Guen. Phal. i. 412, 669.

South Europe?

## 9. EPHYRA ALBIOCELLARIA.

*Flavescens; alæ nigro subconspersæ, disco ochraceo, linea interiore incompleta, linea exterior duplicata angulosa annuloque discali magno albo-pupillato nigris.*

*Geometra ocellaria*, Hübn. Geom. pl. 13, f. 64.

*Geometra albiocellaria*, Hübn. Beitr. 41, f. A. Bork. Eur. Schm. v. 265, 115. Exp. Schm. v. 240, pl. 43, f. 7.

*Leucophthalmia ocellaria*, Hübn. Verz. Schm. 302, 2911.

*Cabera ocellaria*, Treit. Schm. vi. 1, 360, 8.

*Ephyra ocellaria*, Dup. Lep. v. 33, pl. 172, f. 4. Eversm. Faun. Volg.-Ural. 396.

*Ephyra argusaria*, Boisd. Ind. 220, 1828. Herr.-Sch. Eur. Schm. iii. 30, 84.

*Ephyra albiocellaria*, Guen. Phal. i. 412, 670.

Central France. Austria. Hungary. Lower Volga.

a, b. Europe. From M. Becker's collection.

## 10. EPHYRA OMICRONARIA.

*Cinereo-testacea; alæ lineis duabus nigricantibus, 1a undulata subangulata, 2a cuneato-angulosa diffuse subduplicata, linea submarginali diffusa fusca, punctis marginalibus nigris, annulo discali nigricante sat magno.*

———, *Réaum. Ins.* pl. 31, f. 16. *Geoffr. Ina.* ii. 144, 71.  
*De Vill. Ent. Linn.* ii. 318, 454.

*Geometra omicronaria*, *Wien. Verz.* 107, 3. *Bork. Eur. Schm.* v. 262, 113. *Schr. Faun. Boic.* ii. 2, 25, 1645. *Esp. Schm.* v. 150, pl. 26, f. 1, 2. *Ill. N. Ausg. dess.* i. 425, 3. *Hübner. Geom.* pl. 13, f. 65. *Haw. Lep. Brit.* 312.

*Geometra annulata*, *Naturf.* vi. 92, pl. iv. f. 3. *Gotz. Ent. Beitr.* iii. 388, 95. *Scriba, Beitr.* i. 23, pl. iii. f. 3.

*Leucophthalmia omicronaria*, *Hübner. Verz. Schm.* 302, 2912.

*Cabera omicronaria*, *Treit. Schm.* vi. 1, 358, 7.

*Ephyra omicronaria*, *Dup. Lep.* v. 40, pl. 172, f. 7. *Steph. Ill. Brit. Haust.* iii. 198. *Eversm. Faun. Volg.-Ural.* 595. *Boisd. Ind.* 221, 1831. *Herr.-Sch. Eur. Schm.* iv. 31, 85. *De Lah. Schm.* 54. *Guen. Phal.* i. 412, 671.

a—m. England. From Mr. Stephens' collection.

n. England. From Mr. Stevens' collection.

o—q. England.

r. Europe. From M. Becker's collection.

## 11. EPHYRA ORBICULARIA.

*Rufescente-cinerea; alæ linea media diffusa nebulosa rufescente, lineis interiore et exteriori e punctis nigris, punctis marginalibus nigris, annulo discali albo nigro-marginata.*

*Geometra orbicularia*, *Hübner. Geom.* pl. 12, f. 60.

*Leucophthalmia orbicularia*, *Hübner. Verz. Schm.* 302, 2913.

*Cabera orbicularia*, *Treit. Schm.* iii. 1, 364, 10.

*Phalæna quadripustulata*, *Donov. Brit. Ins.* xiii. pl. 63, f. 463.

*Ephyra orbicularia*, *Dup. Lep.* v. 38, pl. 172, f. 6. *Steph. Ill. Brit. Haust.* iii. 198. *Eversm. Faun. Volg.-Ural.* 396. *Boisd. Ind.* 220, 1830. *Herr.-Sch. Eur. Schm.* iii. 31, 87. *De Lah. Schm.* 56. *Guen. Phal.* i. 413, 672.

a. England. From Mr. Stephens' collection.

b—e. England. From Mr. Stevens' collection.

f. England. From Mr. Bouchard's collection.

*g—j.* England. From Mr. Cooke's collection.

*k, l.* England.

*m—p.* Europe. From M. Becker's collection.

## 12. EPHYRA PENDULARIA.

*Albido-cinereascens; alæ nigro sabulosæ, lineis duabus punctularibus remotis punctisque marginalibus nigris, umbra submarginali nigricante, annulo discali albo-pupillato; antica annulo discali rufo; postica annulo discali nigro.*

———, *Deg. Ins.* ii. 360, pl. 6, f. 7. *De Vill. Ent. Linn.* ii. 313, 441.

*Phalæna-Geometra pendularia*, *Linn. Faun. Suec.* 1244. *Clerck, Icon.* pl. 7, f. 5.

*Phalæna pendularia*, *Fabr. Sup.* 63, 64. *Schr. Faun. Boic.* ii. 2, 25, 1644.

*Geometra pendularia*, *Bork. Eur. Schm.* v. 255, 111. *Esp. Schm.* v. 152, pl. 26, f. 3—5. *Ill. N. Ausg. dess.* i. 424, 1. *Rossi, Faun. Etrusc.* ii. 192, 1160. *Hübner. Geom.* pl. 13, f. 66. *Haw. Lep.* 311. *Frey. Beitr.* pl. 54, f. 2.

*Phalæna circularia*, *Fabr. Sup.* 64, 65.

*Geometra pupillaria*, *Brahm, Ins. Kal.* ii. 385, 262.

*Codonia pendularia*, *Hübner. Verz. Schm.* 303, 2915.

*Cabera pendularia*, *Treit. Schm.* iii. 1, 361, 9.

*Ephyra pendularia*, *Dup. Lep.* v. 35, pl. 172, f. 5. *Steph. Ill. Brit. Haust.* iii. 199. *Everm. Faun. Volg.-Ural.* 396. *Boisd. Ind.* 220, 1829. *Sepp. Schm.* vi. pl. 26, f. 1—8. *Herr.-Sch. Eur. Schm.* iii. 31, 86, pl. 58, f. 357. *De Lah. Schm.* 55. *Guen. Phal.* i. 413, 673.

*a—k.* England. From Mr. Stephens' collection.

*l—p.* England.

*q.* Europe. From M. Becker's collection.

## North America.

A. *Alæ non albæ nec cervinæ.*

A. *Alæ fronte obscura.*

A. *Alæ lineis duabus punctularibus.*

B. *Alæ lineis tribus punctularibus.*

B. *Alæ fronte non obscura.*

B. *Alæ albæ.*

C. *Alæ cervinæ.*

- *culicaria*, *Guen.*

- *myrtaria*, *Guen.*

- *solitaria*, *Walk.*

- *pendulinaria*, *Guen.*

- *stabilita*, *Walk.*



## 13. EPHYRA CULICARIA.

**Mas.** *Pallide testaceo-cinerea; frons cervina; alæ lineis duabus punctularibus nigris, annulo discali albido, umbra rufescente nonnunquam obsoleta, fimbria rosea.*

*Ephyra culicaria*, Guen. *Phal.* i. 407, 658.

Georgia.

## 14. EPHYRA MYRTARIA.

**Mas.** *Carneo-cinerea; frons ferruginea; alæ nigro conspersæ, lineis tribus e punctis nigris, 3a marginali, puncto discali nigro albo-pupillato; anticæ subtus roseo-carneæ; posticæ subtus ex parte albæ lineis duabus carneis vix conspicuis.*

*Ephyra myrtaria*, Guen. *Phal.* i. 408, 660.

a. Georgia. From Mr. Milne's collection.

b. Illinois. Presented by E. Doubleday, Esq.

## 15. EPHYRA PENDULINARIA.

**Mas.** *Alba; frons fusca; antennæ late pectinatæ; alæ cinereo sabulosæ, lineis duabus punctularibus, umbra submarginali interrupta annuloque discali ovato nigro-cinereis, punctis marginalibus nigris.*

*Ephyra pendulinaria*, Guen. *Phal.* i. 414, 674.

North America.

## 16. EPHYRA SOLITARIA.

**Fœm.** *Subroseo-testacea, subtus albida; alæ nigro subconspectæ, linea exteriori subrecta guttulari guttisque marginalibus nigris; anticæ subfalcata, linea interiori arcuata non obliqua e maculis tribus nigris.*

*Female.* Testaceous, with a slight rosy tinge, whitish beneath. Wings thinly black-speckled, with an exterior nearly straight line of black dots, which increase in size towards the interior border; marginal points black, minute; no traces of the discal ringlet. Fore wings subfalcate, with a curved but not oblique interior line, which is composed of three black spots, and on the interior border is near

the exterior line. Length of the body 4 lines ; of the wings 10 lines.

a. East Florida. Presented by E. Doubleday, Esq.

### 17. EPHYRA STABILITA.

*Fœm.* *Pallide cervina, nigro conspersa ; palpi porrecti, articulo 3o minimo ; alæ sat spissæ, fascia marginali lata nigra, fimbria basi nigro notata, margine interiore fimbriato, puncto discali punctisque marginalibus elongatis subtus nigris ; antice subfalcata, fascia interiore nigra lata antice abbreviata.*

*Female.* Pale fawn-colour, black-speckled, more cinereous beneath. Palpi porrect, hardly extending beyond the head ; third joint conical, very minute. Wings rather stout ; fringe long, full, black-marked at the base ; interior border fringed ; a broad marginal black band, which is composed of confluent speckles ; under side with a black distinct discal point, and with elongated black marginal points. Fore wings subfalcate, with a broad interior black band, which is obsolete towards the costa ; the latter slightly convex. Length of the body  $4\frac{1}{2}$  lines ; of the wings 11 lines.

a. East Florida. Presented by E. Doubleday, Esq.

### West Indies.

### 18. EPHYRA RUDIMENTARIA.

*Pallide carnea ; frons cervina ; vertex sulphureo-albus ; palporum articulus 3us brevis ; alæ lineis duabus punctularibus nigris, umbra media cinerea, annulo discali oblonga ; posticæ costæ recta, angulo interiore acuto.*

*Ephyra rudimentaria*, Guen. *Phal.* i. 407, 657.

*Var. ♀* Palpi slender, ascending ; third joint lanceolate, about half the length of the second. Abdomen with a black point on each segment. Wings with the interior and exterior lines very remote from each other ; a slight diffuse submarginal line, with a row of blackish spots along its inner side. Length of the body  $4\frac{1}{2}$  lines ; of the wings 12 lines.

a. St. Domingo. From Mr. Tweedie's collection.

## 19. EPHYRA NANARIA.

**Form.** *Testaceo-cinerea; palpi articulo 2o piloso latissimo, 3o conico minimo; antennæ breves; alæ ferrugineo subconspersæ; lineis duabus remotis subundulatis subangulatis punctisque marginalibus nigricantibus, plaga discali fusca diffusa punctum album fusco marginatum includente; anticæ linea interiore costam versus abrupte angulata.*

**Female.** Testaceous-cinereous. Second joint of the palpi pilose, very broad; third conical, very short. Antennæ short. Wings minutely ferruginous-speckled; interior and exterior lines blackish, remote from each other, slightly undulating and angular, the former abruptly angular near the costa of the fore wings; marginal points blackish, elongated; a brown diffuse discal patch in each wing, including the white brown-bordered ringlet; under side whitish testaceous. Length of the body 3 lines; of the wings 9 lines.

**a. St. Domingo.** From Mr. Tweedie's collection.

## 20. EPHYRA PRODITATA.

**Form.** *Testacea, sat robusta, fusco conspersa; palpi ascendentes, articulo 3o minimo; alæ sat densæ, linea interiore obliqua fasciaque exteriori lata rectis parallelis ochraceis, linea adhuc exteriori nigricante-dentata diffusa vix conspicua, gutta discali rotunda atra, punctis marginalibus nigris elongatis.*

**Female.** Testaceous, rather stout, thickly brown-speckled, whitish cinereous beneath. Palpi ascending; third joint very short. Hind tibiæ with four long spurs. Wings rather stout, less thickly speckled towards the base; an interior straight oblique ochraceous line, which is parallel and near to a broad less distinct exterior ochraceous band; the latter is bounded on the outer side by a very indistinct dentate diffuse blackish line; discal dot round, deep black; marginal points black, elongated. Fore wings acute; costa straight. Hind wings with the interior angle prominent. Length of the body 4 lines; of the wings 11 lines.

This species recedes much from the typical form of the genus.

**a. St. Domingo.** From Mr. Tweedie's collection.

## South America.

## 21. EPHYRA? FARTARIA.

*Rufescens; alæ annulo discali lineisque tribus exterioribus punctularibus nigris; antica linea interiore punctulari punctisque apud marginem interiorem nigris.*

*Phalæna-Geometra punctaria*, Stoll, *Cram. Pap. Exot.* v. 58, pl. 12, f. 10.

*Ephyra fartaria*, Guen. *Phal.* i. 406, 655.

Brazil. Surinam.

## 22. EPHYRA? PERSPECTARIA.

*Fœm. Pallide lutea, sat robusta; vertex nigricans; palpi ascendentes, brevissimi, supra rufescentes; pedes sat validi; alæ amplæ, nigricante subconsersæ, lineis tribus angulosis purpurascence-cinereis, linea marginali fusca tenui, puncto discali albo marginato; antica subfalcata; postica angulo interiore producto.*

*Female.* Pale luteous, moderately stout. Vertex blackish. Palpi ascending, very short, reddish above; third joint very minute. Legs somewhat stout; hind tibiæ with four long spurs. Wings ample, very minutely blackish speckled, with three zigzag purplish cinereous lines; marginal line brown, slight; discal point white, bordered with purplish cinereous. Fore wings subfalcate; costa and exterior border hardly convex. Hind wings not extending beyond the abdomen; exterior border convex; interior angle prominent. Length of the body 5 lines; of the wings 14 lines.

*a. Venezuela.* From Mr. Dyson's collection.

## 23. EPHYRA? PERFUSARIA.

*Cervina, subtus cinerea; tibiæ posticæ quadricalcaratæ; alæ elongatæ, nigro subconsersæ, lineis interiore et exteriori fuscis denticulatis, 2a extus fusco diffuse submarginata, linea adhuc exteriori nigra punctulari, lunulis marginalibus nigricantibus pallido marginatis, fimbria nigricante punctata, puncto discali albo; antica subfalcata, puncto fusco-marginato; postica puncto nigro-marginato.*

Fawn-colour, cinereous beneath. Head and abdomen wanting. Hind tibiæ with four long spurs. Wings elongate, thinly black-speckled; interior and exterior lines brown, denticulated; the latter partly and diffusedly brown-bordered on the inner side; a more exterior line of black points; marginal lunules blackish, pale bordered; fringe with blackish points; discal point white, brown-bordered in the fore wings, black-bordered in the hind wings. Fore wings sub-falcate; costa straight; exterior border hardly convex. Hind wings with the exterior border convex. Length of the body  $4\frac{1}{2}$ ? lines; of the wings 12 lines.

♂. Venezuela. From Mr. Dyson's collection.

### West Africa.

#### 24. EPHYRA? LEONARIA.

**Mas.** *Lutea, subtus roseo-ochracea; palpi porrecti, longi, subangulati; antennæ late pectinatae, apices versus simplices; thorax margine antico purpurascens-cinereo; alæ amplæ, rufescente conspersæ, lineis quatuor purpurascens-cinereis dentatis, 3a bene determinatu nigro punctata, 4a informi interrupta; antica apice subrotundata, costa purpurascens-cinerea; postica puncto discali albo nigro submarginato.*

**Male.** Luteous, rosy ochraceous beneath. Palpi porrect, long, slightly angular; third joint linear, much more slender than the second, and more than half its length. Antennæ broadly pectinated to full two-thirds of the length. Thorax purplish cinereous in front. Abdomen tinged with the same hue. Hind tibiæ with four spurs. Wings ample, reddish speckled; interior, middle and submarginal lines purplish cinereous, dentate, the latter very irregular and interrupted; exterior line more concise, distinguished by black points; marginal points black; exterior border convex. Fore wings slightly rounded at the tips; costa purplish cinereous. Hind wings with a white partly black-bordered discal point. Length of the body 6 lines; of the wings 16 lines.

♂. Sierra Leone. From Mr. Foxcroft's collection.

## South Africa.

### 25. EPHYRA LYCISCARIA.

*Carneo-cinerea ; frons badia ; vertex pallide cinereus ; alæ punctis submarginalibus maculisque marginalibus nigris ; antica litura nigra apud marginem interiorem.*

*Ephyra lyciscaria*, Guen. *Phal.* i. 406, 656.

Namaqua Region.

### 26. EPHYRA OECARIA.

*Mas. Pallide carneo-cinerea ; frons cinerascens, ex parte obscure rosea ; alæ cinereo saturato nebulosæ, lineis duabus punctularibus nigris, umbra media vix conspicua, annulo discali minimo.*

*Ephyra oecaria*, Guen. *Phal.* i. 407, 659.

Namaqua Region.

## Ceylon.

### 27. EPHYRA OBRINARIA.

*Violaceo-cinerea ; frons plana, albo-cinerea, supra roseo tincta ; abdomen roseo suffusum ; alæ subdentatæ, roseo sabulosæ, lineis duabus punctularibus punctis submarginalibus punctisque marginalibus duplicatis nigris ; antica puncto discali nigro minimo ; postica puncto discali nigro albo-pupillato.*

*Ephyra obrinaria*, Guen. *Phal.* i. 414, 675.

a. Ceylon. From M. Nietner's collection.

### 28. EPHYRA ABHADRAA.

*Fœm. Rufescens ; frons alba ; palpi ascendentes, graciles, brevissimi ; antennæ sat validæ ; alæ cinerascens suffusæ, plaga submarginali informi pallide testacea lineam rufam undulatam includente ; antica acutæ, annulo discali nigro ; postica gutta discali alba elongata rufo marginata.*

*Female.* Reddish, reddish cinereous beneath. Front white. Palpi ascending, slender, very short. Antennæ rather stout. Hind tibiæ with four long spurs. Wings mostly overspread with dull cinereous ; each with a pale testaceous irregular submarginal patch,

which is traversed by an undulating red line. Fore wings acute discal ringlet black, incomplete. Hind wings with a very distinct elongated white red-bordered discal dot. Length of the body 4 lines; of the wings 12 lines.

**α. Ceylon.** Presented by Dr. Templeton.

### 29. EPHYRA VUSARMANA.

*Albido-cinerea, rufescente vix tincta; palpi porrecti, breves; alae vix conspersae, lineis duabus nigris punctularibus remotis, punctis marginalibus nigris, gutta discali alba; anticae acutae, gutta rufo marginata; posticae gutta nigro marginata.*

*Female.* Whitish cinereous, with a very slight reddish tinge. Palpi porrect, short. Wings very indistinctly speckled; interior and exterior lines of black points, very remote from each other, the latter much more distinct and complete than the former; marginal points black; discal dot white, red-bordered in the fore wings, black-bordered in the hind wings. Fore wings acute. Length of the body 4? lines; of the wings 12 lines.

**α. Ceylon.** Presented by Dr. Templeton.

### 30. EPHYRA EXTRUSATA.

*Fœm. Albido-cinerea; caput antice fuscum; palpi ascendentes, breves, graciles; thorax macula antica transversa quadrata cuprea; alae nigro subconspersae, linea exteriori fuscescente dentata indistincta nigro punctata, linea media vix conspicua, punctis marginalibus nigricantibus elongatis, litura discali ochracea elongata e squamis chalybæis submarginata.*

*Female.* Whitish cinereous. Head brown in front, with a fringe of fawn-coloured hairs on the hind border. Palpi ascending, short, slender. Thorax with a transverse quadrate cupreous band in front. Abdomen not extending beyond the hind wings. Legs rather stout, not long; hind tibiae with four long spurs. Wings minutely and thinly black-speckled; exterior line brownish, dentate, indistinct, marked with black points; some slight traces of a similar middle line; marginal points blackish, elongated; discal mark elongated, ochraceous, incompletely bordered with chalybeous elevated scales. Length of the body 5 lines; of the wings 15 lines.

This species recedes much from the typical characters of *Ephyra*, and approaches those of the *Acidalidæ*.

a. Ceylon. Presented by Dr. Templeton.

### Singapore.

#### 31. EPHYRA? QUADRISTRIARIA.

*Fœm.* *Rufescens, subtus flava; alæ flavae, rufescente conspersæ, fascia exteriori perobliqua rufescente; anticæ acutæ, lituris duabus costalibus obliquis fuscis.*

*Ephyra quadristriaria*, Walk. Journ. Linn. Soc. iii. 194.

Singapore.

### Borneo.

#### 32. EPHYRA URNARIA.

*Testaceo-cinerea; frons rufa; vertex albus; alæ anticæ conferte fusco nebulosæ, linea media nigra valde sinuata, subtus ferrugineo-rufæ linea media punctoque discali oblongo nigris; posticæ margine fusco nebuloso, fasciola ferruginea punctum discali oblongum nigrum includente, subtus fulvescentes.*

*Ephyra urnaria*, Guen. Phal. i. 406, 654.

Borneo.

#### 33. EPHYRA PRIVATA.

*Fœm.* *Testaceo-albida; palpi porrecti, graciles, angulosi, sat longi; alæ ochraceo subconsersæ, lineis quatuor ochraceis dentatis diffusis incompletis, punctis marginalibus nigris; anticæ puncto discali ochraceo; posticæ gutta discali albida nigricate marginata.*

*Female.* Testaceous whitish. Palpi porrect, slender, angular, rather long; third joint almost as long as the second. Abdomen not extending beyond the hind wings. Hind tibiæ with four long spurs. Wings thinly and minutely ochraceous-speckled; interior middle, exterior and submarginal lines ochraceous, dentate, diffuse, incomplete; marginal points black. Fore wings somewhat rounded at the tips, with an ochraceous discal point. Hind wings with a whitish blackish-bordered discal dot. Length of the body 4 lines; of the wings 12 lines.

Sarawak, Borneo. In Mr. Saunders' collection.



## 34. EPHYRA? CONTRARIA.

**Fœm.** *Cinereo-ferruginea; caput fuscum; palpi porrecti, compressi, lati, subciliati, articulo 3o minimo; tibiæ posticæ subincrassatæ; alæ sat densæ, nigro subconspersæ, trilineatæ, lineæ 1a nigra punctulari, 2a fusca denticulata extus cinerascens marginata, 3a angulosa cinerascens, punctis marginalibus nigris, fimbria spissa; anticæ acutæ, litura discali e punctis tribus nigris.*

*Female.* Cinereous-ferruginous. Head and palpi dark brown; the latter compressed, porrect, rather broad, slightly fringed, extending beyond the head; third joint very minute. Hind tibiæ slightly incrassated, with four long spurs. Wings rather stout, minutely and thinly black-speckled; interior line of black points; exterior line brown, denticulated, pale cinereous-bordered on the outer side; submarginal line zigzag, pale cinereous; marginal points black, very distinct; exterior border convex; fringe long, full, double. Fore wings acute, with a discal mark of three black points; costa straight. Hind wings extending a little beyond the abdomen. Length of the body 4 lines; of the wings 10 lines.

Sarawak, Borneo. In Mr. Saunders' collection.

Country unknown.

## 35. EPHYRA FUNGINARIA.

**Fœm.** *Cinerea; vertex concolor; frons cervina; palpi concolores, articulo 3o brevi; alæ rufescente variæ, lituris vix conspicuis, lineis duabus punctularibus umbraque media nigricante-cinereis, puncto discali minimo albo-pupillato cinereo-circumdato; anticæ acutæ, subfalcatæ.*

*Ephyra funginaria.* Guen. *Phal.* i. 408, 661.

## Genus 4. ANISODES.

Corpus gracile. Palpi longi; articulus 3us filiformis, gracilis, sæpiissime (fœm. præsertim) longissimus. Antennæ maris pectinatæ, apices versus filiformes. Abdomen subdepressum, apice sæpe obtusum. Tibiæ posticæ intus sæpe fasciculatæ. Alæ læves, integræ aut dentatæ; anticæ trigonæ, plus minusve acutæ; posticæ trigonæ aut rotundatæ, puncto discali nonnunquam nullo.

*Dosithea et Zonosoma, Herr.-Sch.*

*Anisodes, Guen. Phal. i. 415.*

Body slender. Palpi long; third joint filiform, slender, generally very long, and especially so in the female. Antennæ of the male pectinated to two-thirds or to three-fourths of the length. Abdomen slightly depressed, nearly alike in both sexes, often obtuse at the tip. Hind tibiæ often furnished on the inner side with tufts of hairs. Wings smooth, entire or dentate. Fore wings triangular, more or less acute. Hind wings less developed, triangular or rounded, with or without a discal point.

### South America.

#### A. Vertex albus.

A. Alæ venis albo non punctatis. - - - sypharia, *Guen.*

B. Alæ venis albo punctatis. - - - globaria, *Guen.*

#### B. Vertex non albus.

A. Frons lineata. - - - - - illinaria, *Guen.*

##### B. Frons non lineata.

##### A. Frons obscura.

##### a. Palpi articulo 3o longo.

i. Femora postica maris non incrassata. urcearia, *Guen.*

ii. Femora postica maris densissime pilosa. coxaria, *Guen.*

b. Palpi articulo 3o brevi. - - - nudaria, *Guen.*

##### B. Frons pallida.

##### a. Alæ bilineatæ.

##### i. Alæ lineis non punctularibus.

discopunctaria, *Herr.-Sch.*

ii. Alæ lineis punctularibus. - lateritiaria, *Herr.-Sch.*

b. Alæ quinque lineatæ. - - - prunelliaria, *Herr.-Sch.*

### 1. ANISODES URCEARIA.

*Mas. Pallide testaceo-cinerea; frons cervina; palporum articulus 2us albo-fuscoque varius, 3us longus rectus longus spatulatus; alæ fusco conspersæ, lineis quatuor e punctis nigris; 3o submarginali, 4a marginali duplicata, annulo discali nigro, umbra media undulata nebulosa.*

*Anisodes urcearia, Guen. Phal. i. 415, 676.*

Cayenne.

## 2. ANISODES COXARIA.

**Mas.** *A. urcearæ affinis; femora postica valde incrassata, densissime pilosa; alæ subdentatæ, anticæ annulo discali minimo; posticæ annulo discali sat magno.*

*Anisodes coxaria, Guen. Phal. i. 416, 677.*

Mayenne.

## 3. ANISODES ILLINARIA.

**Mas.** *A. urcearæ affinis; frons valde plana, roseo tincta vinosa unilineata; antennæ minus pectinatæ; alæ magis dentatæ; annulo discali magis oblongo; anticæ magis oblongæ; posticæ apud angulum interiorem truncatæ.*

*Anisodes illinaria, Guen. Phal. i. 416, 678.*

Brazil.

## 4. ANISODES SYPHARIA.

**Mas.** *Pallide testaceo-rufescens; vertex albus; alæ subdentatæ, non conspersæ, punctis submarginalibus et marginalibus vix distinctis; anticæ puncto albo minimo; posticæ litura discali nigra punctum album includente; tibiæ posticæ fasciculatæ. Fœm.—Pallidior, magis flavescens; palpi filiformes, longi; tibiæ posticæ nudæ.*

*Anisodes syptharia, Guen. Phal. i. 416, 679.*

Mayenne.

## 5. ANISODES NUDARIA.

*Testaceo-rufescens; frons badia; palpi applicati, articulo 3o brevi; tibiæ posticæ nudæ; alæ subdentatæ, lineis duabus umbratis nigricantibus nigro punctatis; anticæ puncto discali cinereo vix conspicuo; posticæ gutta ovali alba nigro marginata.*

*Anisodes nudaria, Guen. Phal. i. 417, 680.*

Brazil.

## 6. ANISODES DISCOPUNCTARIA.

*Ochracea; alæ lateritio conspersæ, lineis interiore et exteriori undulatis angulosis violaceo-cinereis, gutta discali cyanescente-alba nigro marginata, punctis marginalibus lateritiis; anticæ linea basali flexa.*

*Dosihea discopunctaria*, Herr.-Sch. Eur. Schm. pl. 59, f. 331.  
*Anisodes discopunctaria*, Guen. Phal. i. 417, 681, pl. 16, f. 7.

Brazil.

#### 7. ANISODES GLOBARIA.

Mas. *Rufescente-ferruginea; vertex albus; antennæ late pectinatae; alæ linea exteriori nigricante undulata diffusæ, venis albo-punctatis; anticæ lineis duabus interioribus nigricantibus arcuatis diffusis, puncto discali albo; posticæ ocello discali albo.*

*Zonosoma binocellaria?* Herr.-Sch. Exot. Schm. pl. 62, f. 351.  
*Anisodes globaria*, Guen. Phal. i. 417, 692.

Colombia. Brazil.

#### 8. ANISODES LATERITIARIA.

*Lateritia; alæ lineis duabus punctularibus, punctis marginalibus annuloque discali nigris, linea media nebulosa undulata lineaque submarginali maculari nigricantibus.*

*Zonosoma lateritiaria*, Herr.-Sch. Exot. Schm. pl. 59, f. 332.  
*Anisodes lateritiaria*, Guen. Phal. i. 418, 684.

Venezuela.

#### 9. ANISODES PRUNELLIARIA.

*Flavescente-testacea; alæ lineis quinque incompletis punctularibus nigris, linea marginali bene determinata, annulo discali nigro parvo.*

*Zonosoma prunelliaria*, Herr.-Sch. Exot. Schm. pl. 59, f. 329.  
*Anisodes prunelliaria*, Guen. Phal. i. 420, 688.

a—c. Venezuela. From Mr. Dyson's collection.

### Hindustan.

#### 10. ANISODES INTERPULSATA.

Fœm. *Pallide rufescente-cinerea, subtus alba; palpi ascendentes, longissimi, articulo 3o lineari gracili; alæ lineis duabus punctularibus, puncto discali minimo punctisque marginalibus nigris, lineis tribus cinereis dentatis valde indistinctis.*

*Female.* Much resembling *A. prunelliaria*. Pale reddish cinereous, white beneath. Palpi ascending, very long; third joint linear, slender, shorter than the second. Abdomen with a black

point on each segment. Wings with the interior and exterior lines composed of black points, the latter accompanied by a dentate, very indistinct cinereous line, which is succeeded by an equally indistinct submarginal line; middle line also like the exterior one; discal point black, not larger than the marginal black points, of which the outer row is between the veins. Length of the body 5 lines; of the wings 16 lines.

Hindustan. In Mr. Saunders' collection.

### Ceylon.

#### 11. ANISODES IMITARIA.

*Fœm. Testacea; caput antice ochraceum; palpi ascendentes, articulo 3o lanceolato; thorax ochraceo fasciatus, antice chalybeus; abdomen fasciis ochraceis indistinctis; alæ ochraceo conspersæ, lineis duabus denticulatis fuscescenti-ochraceis ochraceo-cinerascente diffuse marginatis, fascia submarginali ochraceo-cinerea informi interrupta, linea marginali fusca interrupta.*

Closely allied to *A. camptogrammaria*. *Female*.—Testaceous, paler beneath. Head ochraceous in front. Palpi ascending; third joint lanceolate, not more than half the length of the second. Thorax with an ochraceous band in the middle, chalybeous-tinged in front. Abdomen with indistinct irregular ochraceous bands. Wings ochraceous-speckled, with denticulated brownish ochraceous interior and exterior lines, these latter (the first on the outer side, the second on the inner side) diffusedly bordered with ochraceous-cinereous; a very incomplete and irregular ochraceous-cinereous submarginal band; marginal line brown, interrupted by each vein. Length of the body 5 lines; of the wings 14 lines.

The absence of the discal point sufficiently distinguishes this from the other species of *Anisodes*.

a. Ceylon. Presented by Dr. Templeton.

#### 12. ANISODES OBLIVIARIA.

*Fœm. Testacea; palpi porrecti, longi, graciles, subangulati; alæ rufescente subconsersæ, lineis duabus nigris punctularibus indeterminatis, fasciis exteriori et submarginali dentatis ochraceo-cinereis subobsoletis, punctis marginalibus nigris; antica puncto discali nigro; postica macula discali argentea nigro marginata.*

*Female.* Testaceous. Palpi porrect, long, slender, slightly angular; third joint linear, nearly as long as the second. Wings minutely reddish speckled, with slight indications of the two lines of black points; some almost obsolete traces of the exterior and sub-marginal dentated ochraceous-cinereous bands; marginal points black. Fore wings with a black discal point. Hind wings with a silvery black-bordered discal spot, which varies in size. *Var. β.*—Wings reddish testaceous; speckles less obvious; exterior line of black points more distinct. Length of the body 5—6 lines; of the wings 14—16 lines.

*a, b.* Ceylon. Presented by Dr. Templeton.

*c.* Colombo, Ceylon. From M. Nietner's collection.

### 13. ANISODES? OBRIMARIA.

*Mas.* Testacea, rufescente conspersa; caput antice album; palpi porrecti, longiusculi, sat graciles; antennæ sat late pectinatae, apices versus simplices; tibiæ posticæ bicalcaratæ; alæ densæ, lineis duabus nigris punctularibus valde remotis, punctis marginalibus nigris; anticæ puncto discali nigro; posticæ litura parva discali alba elongata nigro marginata.

*Male.* Dull testaceous, very thickly reddish speckled, much paler beneath. Head white towards the palpi. Palpi porrect, rather long and slender; third joint linear, more than half the length of the second. Antennæ rather broadly pectinated to beyond two-thirds of the length. Hind tibiæ with only one pair of spurs. Abdomen not extending beyond the hind wings. Wings stout, with the interior and exterior lines of black points very remote from each other; marginal points black. Fore wings with a black discal point. Hind wings with a small elongated white black-bordered discal mark. Length of the body lines; of the wings 12 lines.

*a.* Colombo, Ceylon. From M. Nietner's collection.

### 14. ANISODES? CARNEARIA.

*Fœm.* Ferrugineo-rufa, sat robusta; vertex albus; palpi porrecti longi, graciles; alæ spissæ, lineis quatuor dentatis fuscescentibus vix conspicuis; anticæ puncto discali nigricante; posticæ annulo discali nigro albo-notato.

*Female.* Ferruginous-red, much paler beneath, rather stout. Vertex and antennæ white, the latter rather short. Palpi porrect,

long, slender; third joint linear, much shorter than the second. Wings dense, with indistinct traces of four brownish dentate lines. Fore wings with a minute blackish discal point. Hind wings with a black white-pupilled discal ringlet. Length of the body 5 lines; of the wings 14 lines.

a. Ceylon. Presented by Dr. Templeton.

### Singapore.

#### 15. ANISODES EXPUNCTARIA.

*Fœm. Luteo-cervina; palpi longi, angulati; antennæ breviusculæ; alæ ferrugineo subconsersæ, linea media fusca undulata valde indistincta, lineis interiore et exteriori e punctis nigris, punctis marginalibus nigris.*

*Anisodes expunctaria, Walk. Journ. Linn. Soc. iii. 195.*

Singapore.

### Borneo.

#### A. Alæ lutescentes aut flavescences.

##### A. Vertex albus.

▲ Alæ posticæ macula discali argentea. - monetaria, Guen.

##### B. Alæ macula nulla argentea.

a. Frons non cinerea. - - - - - pardaria, Guen.

b. Frons cinerea. - - - - - Sarawakaria, Guen.

##### B. Vertex non albus.

##### ▲ Alæ posticæ puncto discali albo.

a. Alæ posticæ macula discali. - - - areolaria, Guen.

##### b. Alæ posticæ non maculatæ.

i. Alæ anticæ non quadratæ. - - - maximaria, Guen.

ii. Alæ anticæ subquadratæ. - - - intortaria, Guen.

##### B. Alæ posticæ puncto nullo albo.

a. Alæ macula discali - - - - - frenaria, Guen.

##### b. Alæ macula nulla discali.

##### i. Thorax antice cinereus.

\* Alæ fasciis ochraceis. - - - camptogrammaria, Guen.

\*\* Alæ fasciis cinereis. - - - responsaria, Walk.

##### ii. Thorax antice ochraceus.

\* Alæ plaga submarginali. - - - pustularia, Walk.

\*\* Alæ plaga nulla submarginali. - - - eumeleata, Walk.

B. Alæ cineræ. - - - - - illepidaria, Guen.

## 16. ANISODES MONETARIA.

**Mas.** *Pallide testaceo-rufa; vertex albus; femora postica intus lanuginosa; alæ posticæ macula discali magna argentea cinereo marginata. Var.—Testaceo-cinerea; alæ lineæ punctulari.*

*Anisodes monetaria, Guen. Phal. i. 418, 683.*

Borneo.

## 17. ANISODES AREOLARIA.

**Mas.**—*Testaceo-rufa; vertex albus; palpi filiformes, articulo 3o elongato; femora postica pilosa; alæ sericæ, roseo suffusæ, alæ umbris vagis transversis indistinctis; posticæ macula discali nigro-cyanea punctum album includente. Fœm.—Major, ochraceo-flava; alæ ferrugineo strigatæ.*

*Anisodes areolaria, Guen. Phal. i. 418, 685.*

Borneo.

## 18. ANISODES MAXIMARIA.

**Mas.** *Testaceo-rufa; vertex pallidior; frons plana; pedes postici glabri; alæ posticæ puncto discali albo.*

*Anisodes maximaria, Guen. Phal. i. 619, 686.*

Borneo.

## 19. ANISODES INTORTARIA.

**Mas.**—*Lutea; palpi articulo 3o longo lineari; antennæ late pectinatæ; alæ violaceo-rufa conspersæ, lineis duabus punctularibus nigris, umbra media vaga violaceo-cinerea, punctis marginalibus nigris duplicatis; anticæ apud marginem anteriorem subquadrata, puncto subcostali nigro; posticæ puncto discali albo. Fœm.—Minor, pallidior.*

*Anisodes intortaria, Guen. Phal. i. 419, 687.*

Borneo.

## 20. ANISODES PARDARIA.

*Flava; caput ochraceum, vertice albo; thorax ochraceo bifasciatus; alæ ochraceo-conspersæ, fasciis tribus violaceo-cinereis devii*



*ochraceo marginatis, ex parte connexis, puncto discali nigro ;  
antica puncto basali nigricante.*

**Anisodes pardaria**, Guen. *Phal.* i. 420, 689.

**Sarawak**, Borneo.

## 21. ANISODES SARAWAKARIA.

**Fœm.** *A. pardariæ affinis ; frons cinerea, magis plana ; alæ  
cinereo sabulosæ, maculis rufo non lineatis, antica annulo  
ovato discali e macula cinerea.*

**Anisodes Sarawakaria**, Guen. *Phal.* i. 420, 690.

**Sarawak**, Borneo.

## 22. ANISODES CAMPTOGRAMMARIA.

*Flava ; caput ochraceo varium ; thorax antice chalybæo-cinereus ;  
alæ strigis parvis transversis fasciisque tribus deviis ochraceis,  
fascia media extus angulosa marginata, puncto discali nigri-  
cante ; antica costa chalybæo-cinerea.*

**Anisodes camptogrammaria**, Guen. *Phal.* i. 420, 691.

**Sarawak**, Borneo.

## 23. ANISODES RESPONSARIA.

**Fœm.** *Obscure flava ; caput pallide flavum, antice ferrugineum ;  
thorax antice cinereus ; alæ ferrugineo nigroque conspersæ,  
fasciis tribus cinereis deviis valde incisis, la 3a que nigro punc-  
tatis, punctis marginalibus nigris ; antica costa fusco dense  
conspersa, gutta subcostuli nigricante, annulo discali cinereo  
elongato.*

**Female.** Dull yellow. Head pale yellow, ferruginous in front. Thorax cinereous in front. Wings minutely brown and ferruginous-speckled, with three very irregular and much indented cinereous bands ; first and third bands accompanied by black points ; marginal points black. Fore wings thickly brown-speckled along the costa ; a blackish dot near the costa, contiguous to an elongated cinereous ringlet. Length of the body 5 lines ; of the wings 14 lines.

The black points on the wings sufficiently distinguish this from the three preceding species.

Sarawak, Borneo. In Mr. Saunders' collection.

**Var. Mas.** *Testaceo-flava; antennæ late pectinatae, apices versus simplices; alæ purpurascens-cinereo conspersæ et subobsolete fasciatae, lineis interiore et exteriori punctularibus punctisque marginalibus nigris; antica guttis duabus discalibus nigris; postica puncto discali albo elongato nigro-marginato.*

**Male.** Testaceous-yellow, paler beneath. Palpi long; third joint linear, as long as the second. Antennæ broadly pectinated for more than two-thirds of the length. Wings thickly and diffusely covered with purplish cinereous speckles, with two almost obsolete dentate bands of the same hue; interior and exterior lines of black points remote from each other; marginal points black. Fore wings with two black dots in the disk, one behind the other. Hind wings with a distinct elongate white black-bordered point. Length of the body 6 lines; of the wings 16 lines.

a. Ceylon. Presented by Dr. Templeton.

#### 24. ANISODES PUSTULARIA.

**Fœm.** *Flava; caput ochraceo varium; thorax antice ochraceus; abdomen ochraceo fasciatum; alæ ochraceo conspersæ, linea exteriori nigra angulosa ochraceo marginata, plaga submarginali magna informi ochracea nigricante suffusa, puncto discali nigro, punctis marginalibus nigris elongatis.*

**Female.** Yellow. Head partly ochraceous. Third joint of the palpi not more than half the length of the second. Thorax ochraceous in front. Abdomen with ochraceous bands. Wings ochraceous-speckled, with an exterior zigzag black ochraceous-bordered line, which is much abbreviated in front; a large irregular blackish tinged ochraceous patch between the line and the exterior border; discal point black; costa of the fore wings chalybeous, except towards the tip; marginal points blackish, elongated. Length of the body 5 lines; of the wings 13 lines.

It can hardly be termed a variety or subspecies of *A. camptogrammaria*, to which, however, it has a very close affinity.

Sarawak, Borneo. In Mr. Saunders' collection.

## 25. ANISODES EUMELEATA.

**Fœm.** *Flava; caput ochraceum, oculis flavo cinctis; thorax anticæ ochraceus; abdomen ochraceo fasciatum; alæ ochraceo subpunctatæ et trifasciatæ, fasciis 1a et 2a dentatis, hac extus marginata, puncto discali punctisque marginalibus nigricantibus; anticæ striga exteriorè ochracea, costa cinerascens, fascia submarginali tenuissima subarcuata; posticæ fascia submarginali lata.,*

**Female.** Yellow, in structure like the last species. Head ochraceous, yellow about the eyes. Thorax ochraceous in front. Abdomen with ochraceous bands. Wings thinly ochraceous-speckled, with three ochraceous bands; first and second bands dentate; the last dark-bordered on the outer side; discal point and marginal points blackish. Fore wings with an ochraceous streak, which traverses the second and third bands; costa cinereous-tinged, thickly ochraceous-speckled; third or submarginal band very slender, slightly curved. Hind wings with the third band broad, diverging in front from the exterior band. Length of the body 5 lines; of the wings 14 lines.

Sarawak, Borneo. In Mr. Saunders' collection.

## 26. ANISODES FRENARIA.

**Fœm.** *Straminea; palporum articulus 2us vinoso varius; alæ subdentatæ, violaceo conspersæ, lineis tribus sinuatis vinoso-cinereis, macula discali vinoso-rufa cyanescente-cinereo notata, punctis marginalibus nigris duplicatis.*

*Anisodes frenaria, Guen. Phal. i. 421, 692.*

Borneo.

## 27. ANISODES ILLEPIDARIA.

**Fœm.** *Parva, pallide carneo-cinerea; alæ atomis, lineis duabus punctularibus, umbra media angulosa punctoque minimo discali saturatioribus vix conspicuis.*

*Anisodes illepidaria, Guen. Phal. i. 421, 693.*

Sarawak, Borneo.

The three following species hardly belong to *Anisodes*, and may form three distinct genera, when more species allied to them are discovered.

## 28. ANISODES? DECRETARIA.

**Mas.** *Albido-testacea; palpi porrecti, graciles, longiusculi; antennæ late pectinatæ, apices versus simplices; alæ fuscescente subconspersæ, lineis interiore et exteriori e punctis fuscis, linea media fuscescente denticulata indistincta, punctis marginalibus nigricantibus; posticæ gutta discali albida suboblonga fusco marginata.*

**Male.** Whitish testaceous. Palpi porrect, slender, rather long; third joint linear, about half the length of the second. Antennæ broadly pectinated to nearly two-thirds of the length. Hind tibiæ with two long spurs. Wings thinly brownish speckled; interior and exterior lines of brown points; middle line brownish, denticulated, indistinct; marginal points blackish. Fore wings rounded at the tips; costa and exterior border slightly convex. Hind wings with a whitish rather large slightly oblong brown-bordered discal dot. Length of the body  $4\frac{1}{2}$  lines; of the wings 12 lines.

Sarawak, Borneo. In Mr. Saunders' collection.

## 29. ANISODES? SCRIPTATA.

**Mas.** *Albido-testacea; palpi porrecti, graciles, longissimi; antennæ late pectinatæ, apices versus filiformes; alæ lineis tribus obliquis subundulatis liturisque nonnullis rhomboideis aut cuneatis punctisque marginalibus ferrugineis.*

**Male.** Whitish testaceous. Palpi porrect, slender, very long; third joint linear, nearly as long as the second. Antennæ broadly pectinated to beyond two-thirds of the length. Hind tibiæ with two spurs. Wings with three oblique transverse ferruginous lines; interior line slight, undulating; middle and exterior lines more distinct, slightly undulating, connected on their outer side with some irregularly rhomboidal or cuneiform marks; marginal points ferruginous; exterior border convex. Fore wings slightly acute. Length of the body  $4\frac{1}{2}$  lines; of the wings 12 lines.

Sarawak, Borneo. In Mr. Saunders' collection.

## 30. ANISODES ? SEMICOMPLETA.

**Mas.** *Albido-testacea, robusta; palpi breves, ascendentes, sub-arcuati, articulo 3o minimo; antennæ late pectinatæ, apices versus simplices; abdomen bifasciculatum; alæ ochraceo subconspersæ, lineis duabus punctularibus punctisque marginalibus fuscis, linea media ochracea diffusa indistincta; anticæ venis subcostalibus apud medium contractis quasi nodum fingentibus subtilis fasciculatum.*

**Male.** Whitish testaceous, robust. Palpi short, ascending, slightly curved; third joint very short. Antennæ broadly pectinated to nearly two-thirds of the length. Abdomen with a tuft of curled hairs on each side of the middle. Hind tibiæ with two spurs. Wings thinly ochraceous-speckled, with the interior and exterior lines of brown points; an indistinct diffuse ochraceous middle line; marginal points brown. Fore wings somewhat rounded at the tips; veins towards the costa contracted in the middle, and forming a somewhat tumid knot, which on the under side is tufted. Hind wings with a white brown-bordered discal point. Length of the body  $4\frac{1}{2}$  lines; of the wings 12 lines.

The short palpi of this species distinguish it at once from the typical form of the genus.

Sarawak, Borneo. In Mr. Saunders' collection.

## Fam. 11. ACIDALIDÆ.

*Statura mediocris aut parva. Corpus sæpissime gracile. Proboscis distincta. Palpi sæpissime parvi. Antennæ breviusculæ, maris pubescentes aut pectinatæ. Abdomen non cristatum. Pedes læves; tibiæ posticæ bicalcaratæ aut quadricalcaratæ, maris sæpe incrassatæ calcaribus nullis. Alæ concolores, sæpissime tenues et integræ, lituris non diversis; anticæ trigonæ, bilineatæ, puncto discali; posticæ nonnunquam angulatæ.*

*Acidalidæ, Guen. Phal. i. 422.*

Size moderate or small. Body generally slender. Vertex often differing in colour from the body. Front not prominent, without a tuft. Proboscis distinct. Palpi generally small, not extending much beyond the front. Antennæ rather short, pubescent, or finely pectinated in the male, never plumose. Abdomen not crested. Legs smooth, moderately long; hind tibiæ of the male often incrassated; one pair or two pairs of spurs in the female.

Wings smooth, hardly stout, generally entire, alike in colour and with like markings. Fore wings triangular, with two lines and a discal point. Hind wings rounded, or with one angle on the exterior border.

- A. Antennæ maris appressæ. - - 2. DRAPETODES, *Guen.*  
 B. Antennæ maris non appressæ.  
 A. Frons perangusta. - - - 1. SYNEGIA, *Guen.*  
 B. Frons non perangusta.  
 A. Alæ posticæ incisæ. - - - 3. ASEILLODES, *Guen.*  
 B. Alæ posticæ non incisæ.  
 a. Alæ anticæ dentatæ. - - 4. TRYGODES, *Guen.*  
 b. Alæ anticæ non dentatæ.  
 i. Abdomen cristatum. - - - 5. POMASIA, *Guen.*  
 ii. Abdomen non cristatum.  
 \* Palpi vix conspicui. - - - 6. HYRIA, *Steph.*  
 \*\* Palpi distincti.  
 † Oculi magni. - - - 7. CAMBOGIA, *Guen.*  
 †† Oculi non magni.  
 ‡ Tibiæ posticæ maris pilis densissimis oneratæ.  
 15. CNEMODES, *Guen.*  
 †† Tibiæ posticæ maris non pilosissimæ.  
 § Pedes longi. - - - 16. PELLONIA, *Dup.*  
 §§ Pedes longissimi.  
 19. ZANCLOPTERYX, *Herr.-Sch.*  
 §§§ Pedes non longi.  
 × Tibiæ posticæ quadricalcaratæ.  
 0 Corpus gracile aut gracillimum.  
 + Tibiæ posticæ maris attenuatæ.  
 13. TIMANDRA, *Dup.*  
 ++ Tibiæ posticæ maris non attenuatæ.  
 ++ Alæ tenues.  
 ∞ Alæ non semihyalinæ.  
 — Frons non lata.  
 8. ASTERNA, *Hüb.*  
 — — Frons lata.  
 10. VENUSIA, *Curt.*  
 ∞ Alæ semihyalinæ.  
 20. BERBERODES, *Guen.*  
 +++ Alæ robustæ.  
 9. EUPISTERIA, *Boisd.*  
 00 Corpus robustum.  
 + Palpi robusti. - 14. ODYSIA, *Guen.*

- Palpi graciles. 17. SOMATINA, *Guen.*  
 ×× Tibiæ posticæ maris bicalcaratæ.  
 0 Corpus gracile.  
 → Calcaria non brevissima.  
 12. ACIDALIA, *Treit.*  
 →→ Calcaria brevissima.  
 21. CASSYMA, *Guen.*  
 00. Corpus robustum. - 11. CLETA, *Dup.*  
 ××× Tibiæ posticæ maris non calcaratæ.  
 0 Corpus robustum. 18. ARGYRIS, *Guen.*  
 00 Corpus gracile. - 22. PIGIA, *Guen.*

## Genus 1. SYNEGIA.

**Frons perangusta, acuta. Palpi ascendentes, sat robusti, subrostriformes. Antennæ maris ramis brevissimis approximatis subæqualibus. Abdomen maris lineare, gracile, longissimum. Alæ latæ, integræ, læves, nitentes, lineis parallelis; anticæ linea costali metallica.**

**Synegia, Guen. Phal. i. 423.**

Body rather stout. Front very narrow, forming a little point between the palpi. Palpi ascending, rather thick, almost rostriform. Antennæ of the male with very short branches, which are close together and almost equally long. Abdomen of the male linear, slender, very long. Wings broad, smooth, shining, entire, with parallel bands. Fore wings with a metallic costal line.

## 1. SYNEGIA BOTYDARIA.

*Pallide flavescens ; caput ochraceo varium ; thorax antice chalybæo-cinereus ; alæ lineis quatuor ochraceis subparallelis, linea 1a interrupta, 2a 3aque subundulatis, 4a lata marginali ; anticæ costa chalybæo-cinerea ochraceo notata.*

**Synegia botydaria, Guen. Phal. i. 423, 694.**

**Sarawak, Borneo. Singapore.**

## Genus 2. DRAPETODES.

**Corpus breviusculum, sat robustum. Proboscis brevis. Palpi erecti, graciles, breves, subrecti; articulus 2us 3o vix latior. Antennæ maris spissæ, appressæ, glabræ. Tibiæ posticæ nudæ,**

calcaribus quatuor longis approximatis. Alæ integræ, breves, rotundatæ, velutinæ; posticæ abdomen superantes.

*Drapetodes*, *Guen. Phal.* i. 424.

Body rather short and stout. Proboscis short. Palpi vertical, slender, short, almost straight; second joint hardly broader than the third. Antennæ of the male thick, flattened, smooth. Hind tibiæ bare, with two approximate pairs of long spurs. Wings entire, short, rounded, velvety. Hind wings extending beyond the abdomen.

### 1. DRAPETODES MITARIA.

*Pallide straminea; thorax antice ochraceo marginatus; abdomen ochraceo fasciatum; alæ chalybæo squamosæ, punctis duobus discalibus nigris, lineis nonnullis ochraceis antice subobsoletis, fascia media lata cervina fusco marginata antice obsoleta.*

*Drapetodes mitaria*, *Guen. Phal.* i. 424, 695, pl. 18, f. 6.

Hindustan. Singapore.

a. Ceylon. Presented by Dr. Templeton.

b. Silhet. From the Rev. J. Stainforth's collection.

### Genus 3. ASELLODES.

Corpus robustum. Proboscis mediocris. Palpi breves, squamosi. Antennæ maris ciliis gracillimis approximatis. Abdomen latum, apice conicum bifidum, alas posticas non superans. Tibiæ posticæ bicalcaratæ. Alæ densæ, subdentatæ, maculis discalibus hyalinis; posticæ apud angulum interiorem incisæ sericeo-pilosæ.

*Asellodes*, *Guen. Phal.* i. 424.

Body stout. Proboscis moderately long. Palpi short, squamous. Antennæ of the male with very fine approximate ciliæ. Abdomen broad, conical at the tip, ending in a small bifid point, not extending beyond the hind wings. Hind tibiæ with one pair of short stout spurs. Wings stout, slightly dentate, with hyaline spots on the disk. Hind wings with a deep notch, and clothed with silky hairs at the interior angle.

### 1. ASELLODES LATERNARIA.

*Carneo-rosea; alæ nigro conspersæ, marginibus ochraceo suffusis; antica plaga maxima discali subquadrilobata flavescens-vitrea;*



*posticæ macula guttisque nonnullis discalibus flavescente-vitreis.*

*Asellodes laternaria*, *Guen. Phal. i. 425, 696, pl. 21, f. 3.*

Brazil.

## 2. ASELLODES FENESTRARIA.

**Mas.** *A. laternariæ simillima; alæ albo-cinereæ, olivaceo conspersæ et nebulosæ; anticæ spatio hyalino trigono, linea exteriori sinuata olivaceo umbrata, spatio hyalino extus margineque exteriori parallelis; posticæ magis contractæ, maculis minoribus, linea submarginali distinctiore, umbra adhuc exteriori olivacea.*

*Asellodes fenestraria*, *Zeller, MSS. Guen. Phal. i. 425, 697.*

Colombia?

## Genus 4. TRYGODES.

**Corpus gracile.** Palpi frontem non superantes, apice approximati; articulus 2us squamosus, lævis, ascendens. Pedes longi, sat validi; tibiæ posticæ fasciculatæ. Alæ latæ, inæqualiter dentatæ, plagis discalibus viridibus aut flavis.

*Trygodes*, *Guen. Phal. i. 426.*

**Body slender.** Palpi not extending much beyond the front, approximate at their tips; second joint squamous, smooth, ascending. Antennæ of the male pubescent. Legs long, rather stout; hind tibiæ with a tuft of hairs. Wings broad, acutely, deeply and unequally dentate; disks adorned with green or with yellow patches, less squamous than the borders.

### 1. TRYGODES HERBIFERATA.

**Mas.** *Testaceo-cinerea; alæ fascia interiore e maculis subquadratis saturate viridibus albo marginatis, lineis tribus exterioribus denticulatis fuscis, fascia submarginali cinerea.*

*Trygodes herbiferata*, *Guen. Phal. i. 426, 698, pl. 15, f. 4.*

*T. musivaria*, *Var. ?*

Brazil.

## 2. TRYGODES MUSIVARIA.

*Cinerea* ; alæ fascia interiore e maculis saturate viridibus lineæ exteriori denticulata fusca apud costam nigra, lineæ submarginali nigra denticulata, fascia submarginali cinerea denticulata, lunulis marginalibus nigris ; anticæ punctis basilibus nigris.

*Geometra musivaria*, Herr.-Sch. *Exot. Schm.* pl. 61, f. 340.  
*Trygodes musivaria*, Guen. *Phal.* i. 426, 699.

Brazil.

## 3. TRYGODES SOLANIFERATA.

Mas. *T. herbiferatæ simillima* ; alæ minus dentatæ, apud discum nigro conferte sabulosæ, maculis dissimilibus ochraceo-flavis.

*Trygodes solaniferata*, Guen. *Phal.* i. 427, 700.

Brazil.

## Genus 5. POMASIA.

Corpus gracile. Caput magnum. Palpi recti, contigui, rostriformes ; articulus 3us 2i dimidio non longior. Antennæ filiformes. Abdomen læve, carinatum, cylindrico-conicum, cristis dorsalibus minimis. Pedes longi, gracillimi ; tibiæ posticæ quadricalcaratæ. Alæ tenues, velutinæ, lituris plurimis confusis, fimbria brevi ; anticæ elongatæ ; posticæ sat parvæ.

*Pomasia*, Guen. *Phal.* i. 427.

Body slender. Head large, prominent. Palpi straight, prominent, contiguous, rostriform ; third joint about half the length of the second. Antennæ filiform. Abdomen smooth, cylindric-conical, keeled, with very small dorsal crests. Legs long, very slender ; hind tibiæ with two pairs of spurs. Wings delicate, velvety, with numerous intermingled markings ; fringe short. Fore wings elongate. Hind wings not much developed.

## Hindostan.

## 1. POMASIA PSYLARIA.

*Rufo-ochracea, subtus pallida* ; caput album ; palpi fusci, albo cincti ; thorax et abdomen albo fasciata, ille antice cervinus ; alæ lineis quinque albis angulosis strigas emittentibus fusco marginatis, costa margineque exteriori luteis fusco notatis.

*Pomasia psylaria*, Guen. *Phal.* i. 428, 702.

a. Ceylon. Presented by Dr. Templeton.

## 2. POMASIA SUNANDAVA.

**Fœm.** *Læte flava; caput supra ochraceum, albo fasciatum; palpi porrecti, rostriformes, caput superantes; thorax antice ochraceus; abdomen ochraceo bivittatum; alæ amplæ, fasciis quinque ochraceis variis macularibus aut guttularibus chalybeo micantibus, punctis marginalibus ochraceis; anticæ acutæ; posticæ margine exteriori subflexo.*

**Female.** Bright yellow, paler beneath. Head ochraceous above, with a white band on the vertex. Palpi porrect, rostriform, extending rather far beyond the head; third joint elongate-conical, about one-fourth of the length of the second. Thorax ochraceous in front. Abdomen with two ochraceous stripes. Wings ample, with five very irregular bands composed of various shaped ochraceous spots and dots with chalybeous lustre; marginal points ochraceous; under side with a brown mark on the middle of the exterior border. Fore wings acute; exterior border convex, very oblique. Hind wings with the exterior border slightly bent. Length of the body 4 lines; of the wings 12 lines.

a, b. Ceylon. Presented by Dr. Templeton.

## 3. POMASIA MEMORATA.

**Fœm.** *Flava; palpi graciles, breves; antennæ validæ, subpubescentes; thorax et abdomen rufo varia; alæ lincis plurimis denticulatis parallelis rufis; anticæ strigis discalibus exterioribus nigricantibus, gutta discali interiore fusca.*

**Female.** Yellow, paler beneath. Palpi slender, extending very little beyond the head. Antennæ stout, minutely pubescent. Thorax and abdomen varied with red. Hind tibiæ with four spurs. Wings with numerous minutely denticulated red parallel lines; some of these are approximate to each other and form two indistinct bands. Fore wings hardly acute, with four short longitudinal blackish streaks on the exterior part of the disk; a brown dot near the costa on the interior part of the disk, with a yellow space around it. Length of the body 4 lines; of the wings 10 lines.

a. Hindostan. From Archdeacon Clerk's collection.

## Australasia.

## 4. POMASIA VERNAOULARIA.

*Sordide alba; frons fusco notata; abdomen fuscescens, incisuris maculis lateralibus fasciæque basali sordide albis; alæ semi-hyalinæ, nigro fusco reticulatæ, costâ marginibusque ochraceo-flavis, subtus fusco-cinereæ ochraceo suffusæ.*

*Pomasia vernacularia*, Guen. *Phal.* i. 427, 701.

Sarawak, Borneo.

## 5. POMASIA AMPLIFICATA.

*Fœm. Late flava; caput et thorax ochraceo varia; palpi porrecti, longiusculi, articulo 3o conico; tibiæ posticæ quadricalcaratæ; alæ latæ, fasciis argenteo-ochraceis, fasciis basali et interiore valde excavatis et interruptis, fascia exteriori integra angulosa, lineâ submarginali angulosa ex parte duplicata.*

*Female.* Bright yellow, whitish beneath. Head and thorax varied with orange. Palpi porrect, about as long as the breadth of the head; third joint conical, not more than one-fourth of the length of the second. Hind tibiæ with four spurs; one of the first pair much longer than the other. Wings broad, with orange silvery-tinged bands; basal and interior bands much excavated and interrupted; exterior band entire, zigzag; submarginal line zigzag, partly double. Fore wings slightly rounded at the tips. Hind wings with the interior angle prominent. Length of the body 4 lines; of the wings 10 lines.

Sarawak, Borneo. In Mr. Saunders' collection.

## Genus 6. HYRIA.

Corpus sat gracile. Proboscis gracilis. Palpi arcuati, remoti, brevissimi, gracillimi, articulis æqualibus. Antennæ maris ciliatæ, fœm. setacæ. Pedes graciles; tibiæ posticæ bicalcaratæ. Alæ integræ, læves, lituris flavis variis, fimbria longa.

*Eois*, p., *Hübner. Verz. Schm.* 308.

*Hyria*, *Steph. Cat. Lep. Brit.* 150; *Dup.*; *Guen. Phal.* i. 428.

*Acidalia*, p., *Treit.*; *Boisd.*; *Herr.-Sch.*; *Leder.*

Body rather slender. Proboscis slender. Palpi very short and slender, curved, remote, almost rudimentary; joints alike.\* Antennæ thickly ciliated in the male, setaceous in the female. Legs slender; hind tibiæ with two apical spurs. Wings entire, smooth, slightly shining; markings yellow, various, on a darker ground; fringe long.

## 1. HYRIA AUROBARIA.

*Rosea; vertex albus; abdomen basi apiceque luteum; alæ luteæ, linea interiore fasciaque exteriori lata roseis; anticæ costa rosea; posticæ spatio basali roseo.*

———, *De Vill. Ent. Linn.* ii. 317, 609.

*Pyralis auroralis*, *Wien. Verz.* 124, 39. *Ill. N. Ausg. dess.* ii. 27, 39.

*Phalæna variegata*, *Fabr. Ent. Syst.* iii. 2, 205, 282.

*Phalæna muricata*, *Hüfn. Berl. Mag.* iv. 6, 606, 70; *Naturf.* xi. 81, 70.

*Geometra auroraria*, *Bork. Eur. Schm.* v. 477, 233. *Hübner. Geom.* pl. 12, f. 63.

*Eois auroraria*, *Hübner. Verz. Schm.* 308, 2968.

*Fidonia auroraria*, *Treit. Schm.* vi. 1, 267, 4.

*Acidalia auroraria*, *Dup. Lep.* iv. 437, pl. 166, f. 8. *Boisd. Ind.* 223, 1860. *Herr.-Sch. Eur. Schm.* iii. 27, 77.

*Hyria auroraria*, *Steph. Ill. Brit. Haust.* iii. 292. *Guen. Phal.* i. 430, 708.

a. England. Presented by J. C. Dale, Esq.

b—l. England. From Mr. Stephens' collection.

m. England. From Mr. Turner's collection.

n, o. Ireland. From Mr. Bouchard's collection.

p—t. England.

v, u. Europe. From M. Becker's collection.

w. ——— ?

## West Indies.

## 2. HYRIA CONCESSATA.

*Mas. Purpurascens-rosea; palpi minimi; antennæ validæ, ciliatæ; abdomen longum, apicem versus compressum; alæ lineis nonnullis angulosis flavis vix conspicuis; anticæ apice subrotundatæ, costa flava.*

**Male.** Purplish rosy. Palpi very short and slender. Antennæ stout, ciliated. Abdomen long, compressed, except towards the base. Wings with several very indistinct zigzag yellow lines, which are quite obsolete beneath. Fore wings somewhat rounded at the tips; costa yellow. Length of the body 3 lines; of the wings 9 lines.

**a. Jamaica.** From Mr. Gosse's collection.

### South America.

#### A. Thorax flavus.

**A. Alæ obscuræ.** - - - - - pyraustaria, Guen.

#### **B. Alæ flavæ.**

##### **A. Pedes antici non fasciati.**

**a. Caput supra coccineum.** - - - faustaria, Guen.

**b. Caput non coccineum.** - - - subtectata, Walk.

**B. Pedes antici nigro-fasciati.** - - - - vocata, Walk.

#### **B. Thorax non flavus.**

##### **A. Alæ purpurascentes.**

**a. Alæ angulatæ.** - - - - faganaria, Guen.

**b. Alæ non angulatæ.** - - - - triangularia, Guen.

**B. Alæ carneo-roseæ.** - - - - carnaria, Herr.-Sch.

### 3. HYRIA FAUSTARIA.

**Mas.** *Læte flava; caput supra coccineum; antennæ ciliatæ; alæ fasciis macularibus coccineo-roseis; anticæ maculis tribus marginalibus coccineo-roseis; posticæ fasciis ex parte connexis.*

*Hyria faustaria, Guen. Phal. i. 429, 703.*

**Brazil.**

### 4. HYRIA PYRAUSTARIA.

**Fœm.** *Rufescente-violacea; thorax flavus; alæ flavo-fimbriatæ; anticæ suboblongæ, maculis duabus apud marginem interiorem unaque subcostali lineaque flexuosa abbreviata flavis, fimbria trimaculata; posticæ maculis duabus lineaque flexuosa non abbreviata flavis.*

*Hyria pyraustaria, Guen. Phal. i. 429, 704.*

**Brazil.**

## 5. HYRIA TRIANGULARIA.

**Fœm.** *Violaceo-cinerea; alæ linea indistincta flexuosa pallida, margine exteriori fimbriaque flavis; anticæ oblongæ, lanceolatae, plaga apud angulum interiorem trigona flava; posticæ parvæ, rotundatæ, subovatæ.*

*Hyria triangularia*, Guen. *Phal.* i. 429, 705.

Brazil.

**Var.?** **Fœm.** *Purpurascens, gracilis, subtus flava; palpi minimi; antennæ subpubescentes; abdomen longum, peracutum; pedes longi, graciles; pedes postici albi, breves, calcaribus nullis; alæ lineis duabus obscurioribus undulatis flavo submarginatis; anticæ valde productæ, margine exteriori plagaque postica flavis; posticæ margine exteriori flavo.*

**Var.?** **Female.** Purplish, slender, pale yellow beneath. Palpi very short and slender. Antennæ minutely pubescent. Abdomen long, very acute. Legs long, slender; hind legs white, rather short, their tibiæ without spurs. Wings with two darker undulating slightly yellow-bordered lines, the exterior one more distinct than the interior one. Fore wings much elongated, very acute; exterior border extremely oblique; exterior line arrested hindward by a large yellow patch, which includes the interior angle, and is attenuated along the costa to the tip; marginal points black, very small. Hind wings very short, with a yellow exterior border. Length of the body  $2\frac{1}{2}$  lines; of the wings 6 lines.

This species has some of the characters of *Acidalia*.

a. Venezuela. From Mr. Dysou's collection.

## 6. HYRIA FAGANARIA.

**Fœm.** *Purpurascens-cinerea; vertex subalbidus; frons flava; alæ angulatæ, atomis lineisque duabus rufescentibus, linea 2a angulosa magis determinata, margine exteriori fimbriaque flavis intus rufescente umbratis, fimbria apud angulum roseo punctata.*

*Hyria faganaria*, Guen. *Phal.* i. 430, 706.

Brazil.

## 7. HYRIA? CARNARIA.

*Carneo-rosea; alæ striga discali, linea submarginali denticulata, punctis marginalibus fimbriaque flavis.*

*Acidalia carnaria, Herr.-Sch. Exot. Schm. pl. 39, f. 194.*

*Hyria? carnaria, Guen. Phal. i. 431, 709.*

Surinam.

## 8. HYRIA? VOCATA.

*Fœm. Læte lutea; caput ochraceo-rufum; palpi subascendentes, supra nigricantes; pedes antici nigri, albo fusciiati; tibiæ posticæ quadricalcaratæ; alæ fasciis strigisque ochraceo-rufis; linea marginali nigra, fimbria pallida nigro notata; antica acutæ, costa nigro notata, fasciis nigricante nebulosis, punctis tribus discalibus albis hyalinis.*

*Female.* Bright luteous. Head ochraceous-red. Palpi blackish above, slightly ascending, extending a little beyond the head; third joint conical, not more than one-fourth of the length of the second. Fore tibiæ and fore tarsi black, with white bands. Hind tibiæ with four spurs. Wings with red streaks on the spaces between the ochraceous-red irregular bands, which are mostly shaded with blackish on the fore wings; these have black costal marks and three white hyaline discal points; marginal line black; fringe pale, with black marks. Fore wings acute, with elongated black marks along the costa. Hind wings with the interior angle quadrate. Length of the body 2 lines; of the wings 6 lines.

*a, b. Paræ.* From Mr. Bates' collection.

## 9. HYRIA? SUBTECTATA.

*Fœm. Læte flava; vertex albus; frons fusca; thorax et abdomen ochracea; tibiæ posticæ quadricalcaratæ; alæ elongatæ, amplæ, plumbeo subconsersæ, spatio marginali ochraceo-guttato; antica acutæ, spatio interiore cinereo-purpurascente lineas nonnullas obscuriores indistinctas subangulosas includente, linea exteriori nigricante denticulata; posticæ fasciæque lata exteriori roseis.*

*Female.* Bright yellow, paler beneath. Vertex and antennæ white. Front brown. Thorax and abdomen ochraceous. Hind tibiæ with four spurs. Wings elongate, ample, slightly plumbeous.



speckled; marginal space orange-dotted. Fore wings acute; exterior line blackish, denticulated; space between it and the base cinereous-purplish, except along the costa, and including some indistinct darker slightly zigzag lines. Hind wings with the base and a broad exterior band rosy red. Length of the body 4 lines; of the wings 10 lines.

Bogota. In Mr. Saunders' collection.

## Hindustan and Ceylon.

### 10. HYRIA ? MARCIDARIA.

**Mas et fœm.**—*Flavescens, sericea; caput antice ferrugineum; palpi ascendentes, breves, graciles; tibiæ posticæ bicalcaratæ; alæ lineis tribus roseis undulatis subparallelis; anticæ apice subrotundatæ.* **Mas.**—*Antennæ ciliatæ; alæ spatio marginali roseo lineam flavescentem undulatam includente.*

**Male and female.** Yellowish, shining, silky. Head ferruginous in front. Palpi ascending, short, slender. Antennæ of the male ciliated. Hind tibiæ with two long apical spurs. Wings with the interior, exterior and submarginal lines rosy, undulating, nearly parallel; marginal space in the male somewhat rosy, and including an undulating line of the ground hue; exterior border convex. Fore wings somewhat rounded at the tips. Length of the body  $2\frac{1}{2}$  lines; of the wings 6 lines.

**a—h.** Ceylon. From M. Nietner's collection.

### 11. HYRIA GRATARIA.

**Mas.**—*Cervina; vertex albus; palpi porrecti, gracillimi, caput paullo superantes; antennæ late pectinatæ; tibiæ posticæ quadricalcaratæ; alæ purpureo-roseæ, glaucescentes, plus minusve luteo lineatæ, margine exteriori fimbriaque luteis.* **Fœm.**—*Thorax purpureo-roseus; alæ non glaucescentes.*

**Male.**—Fawn-colour, cinereous beneath. Palpi porrect, very slender, extending a little beyond the head. Vertex and antennæ white; the latter broadly pectinated. Abdomen ochraceous. Hind tibiæ with four long spurs. Wings luteous, with a shining glaucous tinge; the rosy hue almost hidden by the numerous diffuse purplish rosy lines; exterior border and fringe luteous. **Female.**—Thorax and wings purplish rosy; luteous exterior border of the wings broader than in the male, but contracted in the middle. Length of the body 3 lines; of the wings 9 lines.

*Var.* The shining glaucous tinge wholly concealing the other hues, except in the disks of the hind wings.

*a, b.* Ceylon. Presented by Dr. Templeton.

*c—e.* Ceylon. From M. Nietner's collection.

## 12. HYRIA OLENARIA.

*Æm.* *Purpurascens-rosea*; *frons flava*; *alæ latæ, margine exteriore fimbriaque flavis, illo subflexo*; *antica acuta, apud discum flavæ rufo conspersæ*; *postica basi flavæ rufo conspersæ, striga discali argentea, angulo interiore acuto.*

*Hyria olenaria, Guen. Phal. i. 430, 707.*

North Hindostan.

## 13. HYRIA DEVIARIA.

*Mas.* *Lutea, subtus pallide flavescens*; *caput postice album*; *thorax roseus*; *abdomen roseo bivittatum*; *pedes albi*; *alæ puncto discali, spatio basali (flavo vario), fascia submarginali latissima informi punctisque marginalibus roseis, fimbria roseo uninotata*; *postica subangulatæ.*

*Male.* Luteous, pale yellowish beneath. Head white, rosy hindward. Thorax rosy. Abdomen with two rosy stripes. Legs white. Wings with a rosy discal point, with the basal part rosy intermingled with yellow, and with a very broad and very irregular and much excavated submarginal rosy band; marginal points rosy; fringe long, with a rosy mark in the middle. Hind wings slightly angular. Length of the body  $3\frac{1}{2}$  lines; of the wings 8 lines.

Hindostan. In Mr. Saunders' collection.

## 14. HYRIA MITIGATA.

*Mas et æm.* *Purpureo-rosea*; *antennæ maris late ciliatæ*; *tibiæ postica quadricalcaratæ*; *alæ flavæ, basi purpureo-roseæ*; *antica fasciis duabus purpureo-roseis, 2a informi maculari*; *postica disco purpureo-roseo.*

*Male and female.* Purplish rosy, whitish beneath. Antennæ of the male broadly ciliated, except towards the tips. Wings yellow, purplish rosy at the base. Fore wings with two purplish rosy bands; inner band much more regular and concise in the male than in the

female; outer band very irregular, and composed of spots and points in both sexes. Hind wings with a purplish rosy disk. Hind tibiae with four long spurs. Length of the body  $2\frac{1}{2}$ —3 lines; of the wings 8 lines.

a. Hindostan. From Archdeacon Clerk's collection.

b. North Hindostan. From Mr. James' collection.

### 15. HYRIA ELATARIA.

**Mas.** *Flavescens, roseo-conspersa, sat valida; palpi porrecti, brevissimi, gracillimi; antennæ simplices, robustæ; thorax antice plumbeus; alæ lineis deviis roseis, linea submarginali undulata e punctis albis, margine exteriori nigricante plumbeo, puncto discali nigro; anticæ vitta costali nigricante plumbea lineam obliquam emittente.*

**Male.** Yellowish, rosy-speckled, rather stout. Palpi porrect, very short and slender. Antennæ simple, rather stout. Thorax leaden-gray in front. Wings with three or four irregular rosy lines; submarginal line undulating, composed of white points; exterior border slightly angular, blackish lead-colour; discal point black; fringe blackish by the angle. Fore wings with a blackish lead-colour costal stripe, the latter emitting an oblique line to the exterior border. Length of the body 2 lines; of the wings 4 lines.

a. Colombo, Ceylon. From M. Nietner's collection.

### 16. HYRIA OBLATARIA.

**Fœm.** *Flavescens, rufo-conspersa; vertex albus; palpi erecti, articulo 3o parvo; antennæ robustæ, subpubescentes; pedes sat validi, tibiis posticis bicalcuratæ; alæ lineis interiore et exteriori flavescentibus subdentatis, margine exteriori nigro, fimbria basi nigricante; posticæ abdomen superantes, angulo interiore producto.*

**Female.** Yellowish, red-speckled. Vertex white. Palpi vertical, rising a little higher than the head; third joint minute. Antennæ stout, minutely pubescent. Legs rather stout; hind tibiae with two long apical spurs. Wings very thickly speckled, excepting the interior and exterior lines, which are slightly dentate and of the ground hue; exterior border black; fringe blackish at the base. Hind wings extending somewhat beyond the abdomen; interior

angle very acute and prominent. Length of the body 2 lines; of the wings 5 lines.

a, b. Colombo, Ceylon. From M. Nietner's collection.

#### 17. HYRIA? RHODINARIA.

**Mas.** *Roseo-rufa; antennæ albæ, pectinatæ; alæ semihyalinæ, basi et apud marginem anteriorem saturatiores, puncto discali nigro.*

**Male.** Rosy red. Antennæ white, pectinated. Abdomen with a pale yellow stripe. Wings semihyaline, irregularly and more or less overspread with rosy red, which chiefly prevails about the base and along the exterior border; a black discal point on each wing. Length of the body 3 lines; of the wings 8 lines.

Ceylon. In Mr. Layard's collection.

### Australasia.

#### 18. HYRIA? APERTARIA.

**Fœm.** *Pallide subrosea, subtus albida; pedes longi, graciles; tibiæ posticæ bicalcaratæ; alæ fasciis duabus pallide flavis, roseo subconsperxis; anticæ apicæ rotundatæ, costa pallide flava; posticæ fimbria pallide flava.*

**Female.** Dull pale rosy, whitish beneath. Legs long, slender; hind tibiæ with two long apical spurs. Wings with two pale yellow bauds, which contain a few rosy speckles, are broadest on the fore wings, and occupy the whole of the costa. Fore wings rounded at the tips. Hind wings with a pale yellow fringe. Length of the body 3 lines; of the wings 8 lines.

Sarawak, Borneo. In Mr. Saunders' collection.

#### 19. HYRIA CONVERSATA.

**Fœm.** *Roseo-rufa, subtus alba; tibiæ posticæ quadricalcaratæ; alæ lineis tribus flavis dentatis subundulatis, fascia marginali flava roseo guttata, fimbria pallide flava roseo apud flexuram notata.*

**Female.** Rosy red, white beneath. Proboscis distinct. Hind tibiæ with four spurs. Wings with the interior, exterior and submarginal lines yellow, dentate, somewhat undulating; marginal space mostly yellow, with rosy dots; fringe pale yellow, with a rosy

mark in each wing where the border is slightly bent. Fore wings hardly acute; costa slightly convex. Length of the body  $3\frac{1}{2}$  lines; of the wings 10 lines.

Sarawak, Borneo. In Mr. Saunders' collection.

## 20. HYRIA? VERSATA.

*Fœm.* *Ochraceo-rufa*; *vertex albus*; *palpi porrecti, brevissimi*; *tibiæ posticæ quadricalcaratæ*; *alæ latiusculæ, lineis nonnullis angulosis interruptis fasciæque mediæ latæ flavis, fimbria flavæ ochraceo-rufo apud flexuram maculata*; *anticæ acutæ*; *posticæ annulo interiore producto.*

*Female.* Ochraceous-red. Vertex and antennæ white. Palpi porrect, slender, very short; third joint very minute. Hind tibiæ with four very long spurs. Wings rather broad, with several slight interrupted zigzag yellow lines and with a broad middle yellow band; fringe yellow, with an ochraceous-red spot in the middle, where there is a slight bend. Fore wings acute. Hind wings with a prominent interior angle. Length of the body 4 lines; of the wings 11 lines.

Sarawak, Borneo. In Mr. Saunders' collection.

## 21. HYRIA? QUADRICOSTARIA.

*Fœm.* *Purpurascente-rosea*; *vertex niveus*; *palpi minimi*; *tibiæ posticæ bicalcaratæ*; *alæ lineis duabus angulosis e punctis nigris, lineâ submarginali angulosa indistincta pallide flavâ, punctis marginalibus nigris*; *anticæ apice rotundatæ, maculis duabus costalibus albis.*

*Female.* Dull purplish red, pale beneath. Vertex pure white. Palpi very short and slender. Hind tibiæ with two long apical spurs. Wings with some minute black speckles; a few of these nearly confluent and forming two slight zigzag lines; submarginal line pale yellow, zigzag, indistinct; marginal points black. Fore wings rounded at the tips, with two pure white costal spots; one of these near the base larger than the other, which is in the middle. Length of the body  $2\frac{1}{2}$  lines; of the wings 7 lines.

Sarawak, Borneo. In Mr. Saunders' collection.

## China

## 22. HYRIA SINICATA.

**Fœm.** *Purpurascente-rosea, gracilis; vertex niveus; palpi minimi; antennæ albæ, longiusculæ, sat graciles; pedes graciles; tibiæ posticæ bicalcaratæ; alæ lineis nonnullis flavis angulosis plus minusve diffusis, fimbria læte flava; anticæ longæ, apice rotundatæ, margine exteriori perobliquo.*

**Female.** Purplish rosy, slender. Vertex pure white. Palpi extremely small. Antennæ white, rather long and slender. Legs slender; hind tibiæ with two apical spurs. Wings with several zigzag more or less diffuse yellow lines; fringe long, bright yellow. Fore wings long, rounded at the tips; exterior border very oblique. Length of the body 2 lines; of the wings 6 lines.

**a. China.** Presented by G. T. Laye, Esq.

## Genus 7. CAMBOGIA.

**Corpus gracile. Frons rotundata. Oculi sat magni. Proboscis subobsoleta. Palpi remoti, graciles, brevissimi. Antennæ maris ramis longis pubescentibus, apice filiformes. Pedes glabri; tibiæ posticæ graciles, calcaribus quatuor approximatis. Alæ integræ, latæ, læves, subuitentes, flavæ, lineis aut maculis roseis.**

**Cambogia, Guen. Phal. i. 431.**

**Body slender. Front rounded. Eyes rather large. Proboscis rudimentary. Palpi far apart, slender, very short. Antennæ of the male with long slender pubescent branches, filiform at the tips. Legs smooth; hind tibiæ slender, with two approximate pairs of spurs. Wings entire, broad, smooth, slightly shining, yellow with rosy lines or spots.**

## 1. CAMBOGIA HELIADARIA.

*Lutea; caput antice rufescens, vertice albo; thorax antice rufescens; alæ fasciis quinque deviis chalybæo-rufescentibus; anticæ fasciis apud costam dilatatis connexis.*

**Cambogia heliadaria, Guen. Phal. i. 432, 710.**

**Guiana. Brazil.**

*Var.?* *Male.* Luteous, paler beneath. Vertex white between the antennæ; front reddish. Wings with four purplish red bands; first band interrupted; second irregular but entire, partly double; third broader than the others, emitting in each wing a branch to the fourth, which is irregular and interrupted. Fore wings with a purplish red costal band, including some luteous costal dots. Length of the body 3 lines; of the wings 9 lines.

Rio Janeiro. In Mr. Fry's collection.

## 2. CAMBOGIA RUSSEARIA.

*Fœm.* *Flava, puniceo varia; alæ anticae puniceae, macula magna postica basali duabusque subapicalibus margineque flavis; posticae puniceo trifasciatae.*

*Eois russearia* (*Geometra tenuis*, *Sphecodes colorata*), *Hübner. Samml. Exot. Schm.* i. 27, 78, f. 155, 156.

*Cambogia russearia*, *Guen. Phal.* i. 432, 711.

Cayenne. Surinam.

*Var.?* *Male and female.* Luteous, paler beneath. Vertex white between the antennæ; front reddish. Wings with bands much like those of the variety of *C. heliadarina*, but far more irregular, and the first band is almost obsolete. Fore wings with the luteous costal line notched but not interrupted as in *C. heliadarina*. Length of the body  $2\frac{1}{2}$  lines; of the wings 7—8 lines.

*a, b.* *Ega.* From Mr. Bates' collection.

## 3. CAMBOGIA BINARIA.

*Mas.* *C. heliadarinae simillima; alæ fasciis duabus angustis deviiis parallelis, linea submarginali tenui.*

*Cambogia binaria*, *Guen. Phal.* i. 432, 712.

Brazil.

## 4. CAMBOGIA GEMELLARIA.

*Mas et fœm.* *Flava; vertex albus; frons cervina; alæ lineis parallelis ochraceo-rufis ex parte connexis, spatio marginali non lineato, punctis submarginalibus rufis; anticae lineis apud costam punctoque disculi violaceis.*

*Cambogia gemellaria*, *Guen. Phal.* i. 433, 713.

Cayenne.

## 5. CAMBOGIA TEGULARIA.

*Lutea ; vertex albus ; frons rufescente-fusca ; thorax rufescens ; alæ puncto discali bene determinato, fasciis tribus e lineis plurimis cinereo-roseis, fascia nigro punctata ; anticæ lineis apud costam dilatatis connexis.*

*Cambogia tegularia*, Guen. *Phal.* i. 433, 714.

Brazil.

*Var. ?* Luteous. Vertex white; front ferruginous-red. Wings with several notched and interrupted purplish red lines; these form three ill-defined bands, and are mostly confluent along the costa of the fore wings; discal point and marginal points brown, the latter small, the former very distinct. Length of the body  $2\frac{1}{2}$  lines; of the wings 7 lines..

The brown marginal dots are not mentioned in Guenée's description of *C. tegularia*.

a. Ega. From Mr. Bates' collection.

b. Venezuela. From Mr. Dyson's collection.

## 6. CAMBOGIA MARCEARIA.

*Fœm. Straminea ; vertex albus ; frons olivacea ; alæ lineis plurimis macularibus undulatis pallidissime olivaceo-cinereis ; anticæ puncto discali obscuro, subtus roseo tinctæ.*

*Cambogia Marcearia*, Guen. *Phal.* i. 433, 715.

Amazon Region.

## 7. CAMBOGIA APYRARIA.

*Mas. Læte flava ; vertex albus ; alæ puncto discali, linea media punctulari indistincta lineaque submarginali punctulari lateritiis.*

*Cambogia apyraria*, Guen. *Phal.* i. 433, 716.

Cayenne.

## 8. CAMBOGIA INSIGNATA.

*Fœm. Lutea ; caput ochraceum, niveo fasciatum ; thorax anticus ochraceo marginatus ; alæ lineis plurimis macularibus ochraceis, maculis paucis majoribus punctoque discali rotundo*



*obscure fuscis, punctis marginalibus ochraceis nigricante notatis; anticæ lineis apud costam confluentibus; posticæ lineis basalibus obsoletis.*

**Female.** Luteous, whitish beneath. Head and fore border of the thorax ochraceous; vertex pure white between the white antennæ. Wings with numerous irregular macular ochraceous lines, in which a few of the largest spots have dark brown disks; discal point dark brown, round, distinct, rather large; marginal points ochraceous, blackish-marked. Fore wings with the lines confluent towards the costa. Hind wings with the lines mostly obsolete towards the base. Length of the body 4 lines; of the wings 12 lines.

**a. Venezuela.** From Mr. Dyson's collection.

#### 9. CAMBOGIA MULTIPLICATA.

**Mas.** *Late lutea; caput ochraceum, vertice niveo; antennæ late pectinatae, apices versus simplices; alæ lineis plurimis ochraceis; anticæ puncto discali punctisque marginalibus fuscis, lineis apud costam purpurascentibus.*

**Male.** Bright luteous or gamboge-yellow, paler beneath. Head ochraceous; vertex pure white between the deeply pectinated white antennæ, the latter simple for more than one-third of the length from the tips. Wings with many ochraceous lines, which have a purplish tinge along the costa of the fore wings. Fore wings with a brown discal point, and with very minute brown marginal points; the latter obsolete hindward. Under side with rosy lines, and with a subquadrate patch on the disk of the fore wings. Length of the body 3 lines; of the wings 8 lines.

**a. Ega.** From Mr. Bates' collection.

#### 10. CAMBOGIA CONTRACTATA.

**Fœm.** *Flava; caput et thorax anticus ochraceo-rufa; alæ fasciis tribus ochraceo-rufis excavatis interruptis chalybæo tinctis, la valde incompleta, 2a 3aque ex parte connexis.*

**Female.** Yellow, much paler beneath. Head and fore part of the thorax ochraceous-red. Wings with three ochraceous-red chalybeous-tinged bands; these bands very irregular and much excavated and interrupted; interior band very incomplete; exterior

and submarginal bands partly connected, the latter extending here and there to the fringe. Length of the body  $2\frac{1}{2}$  lines; of the wings 7 lines.

a. Ega. From Mr. Bates' collection.

### 11. CAMBOGIA SUBANGULATA.

*Fœm.* *Pallide ochracea; caput et thorax saturatiora; vertex albo fasciatus; alæ lineis interiore et exteriori ochraceis undulatis vix conspicuis, linea submarginali sat distincta marginæque exteriori parallelis; anticæ acutæ.*

*Female.* Pale ochraceous. Head and thorax deeper ochraceous; vertex white between the antennæ. Wings with the interior and exterior lines ochraceous, undulating, very indistinct; submarginal line more distinct, parallel to the exterior border, the latter convex. Fore wings acute. Length of the body 3 lines; of the wings 9 lines.

a. Ega. From Mr. Bates' collection.

### 12. CAMBOGIA? PROCURATA.

*Fœm.* *Ochracea, crassa; caput et thorax anticus ochracea; palpi validi, caput paullo superantes; antennæ validæ, simplices; pedes antiqui nigricantes, albo cincti; alæ fusco nigroque subreticulatæ, ferrugineo ex parte nebulosæ, fimbria nigricante-cinerea; anticæ guttis duabus discalibus vitreis; posticæ macula basali vitrea.*

*Female.* Ochraceous, very stout. Head and fore part of the thorax ferruginous. Palpi stout, extending a little beyond the head. Antennæ stout, simple. Thorax with long squamous tegulæ. Abdomen with some blackish marks at the tip. Fore tibiæ and fore tarsi blackish above, with white bands; hind tibiæ with four spurs. Wings irregularly reticulated with brown and along the border with black, partly shaded with ferruginous; fringe blackish cinereous. Fore wings acute, with two round vitreous discal dots; the outer one a little smaller than the other. Hind wings with a larger vitreous spot near the base. Length of the body 2 lines; of the wings 6 lines.

a. Villa Nova. From Mr. Bates' collection.

## 13. CAMBOGIA? DEPORTATA.

**Fœm.** *Flava, sericea, nitens; alæ fasciis quatuor rufis dentatis subundulatis obscuro marginatis.*

**Female.** Yellow, silky, shining. Hind tibiæ with four spurs. Wings with four red darker-bordered slightly undulating and dentate bands. Length of the body 2 lines; of the wings 6 lines.

**a. Venezuela.** From Mr. Dyson's collection.

## Genus 8. ASTHENA.

**Corpus gracillimum. Caput parvum. Proboscis tenuis. Palpi graciles, remoti, brevissimi. Antennæ maris pubescentes, nonnunquam dentatæ aut crenulatæ. Abdomen maris læve, subconicum, sat validum. Pedes glabri; tibiæ posticæ graciles, quadricalcaratæ. Alæ integræ, tenues, subnitentes, lineis undulatis, fimbria sericea.**

**Asthena, Hübn. Verz. Schm. 310; Steph.; Guen. Phal. i. 434.**

**Acidalia, p., Treit.; Dup.; Boisd.; Herr.-Sch.**

**Cidaria, p., Leder.**

Body very slender. Head small. Proboscis feeble. Palpi slender, far apart, very short. Antennæ of the male pubescent, occasionally dentate or crenulate. Abdomen of the male smooth, subconical, rather large. Legs smooth; hind tibiæ slender, with two pairs of distinct spurs. Wings entire, delicate, slightly shining, with undulating lines; fringe silky.

## Europe.

## 1. ASTHENA LUTEATA.

*Flavescens; alæ lineis fasciisque deviis angulatis ochraceis, puncto discali fusco.*

———, *De Vill. Ent. Linn. iv. 510.*

**Geometra luteata, Wien. Verz. 110, 18. Ill. N. Ausg. dess. i. 439, 18. Bork. Eur. Schm. v. 320, 149.**

**Phalæna luteata, Fabr. Ent. Syst. iii. 2, 199, 256.**

**Phalæna centrata? Fabr. Ent. Syst. iii. 2, 200, 258.**

**Phalæna corrigata? Fabr. Ent. Syst. iii. 2, 202, 268.**

**Geometra lutearia, Hübn. Geom. pl. 19, f. 103.**

**Asthena lutearia, Hübn. Verz. Schm. 310, 2988. Steph. Ill. Brit. Haust. iii. 301. Guen. Phal. i. 435, 717.**

*Acidalia luteata*, *Treit. Schm.* vi. 2, 16, 10. *Dup. Lep.* v. 98, pl. 176, f. 3. *Frey. Beitr.* i. 83, 3, pl. 83, f. 3. *Boisd. Ind.* 224, 1881.

*Hydrelia lutearia*, *Herr.-Sch.* iii. 110, 14.

a—l. England. From Mr. Stephens' collection.

m. England. From Mr. King's collection.

n—q. England.

r—w. Europe. From M. Becker's collection.

## 2. ASTHENA CANDIDATA.

*Alba* ; *alæ lineis quatuor subundulatis pallide cervinis, 4a submarginuli interrupta, punctis marginalibus nigris ; antica linea basali, linea 2a duplicata.*

*Geometra candidata*, *Wien. Verz.* 110, 23. *Ill. N. Ausg. dess.* i. 441, 23 ; *N. Mag.* ii. 164. *Bork. Eur. Schm.* v. 327, 155. *Hübner. Geom.* pl. 19, f. 101.

*Phalæna immutata*, *Fabr. Ent. Syst.* iii. 2, 203, 273.

*Geometra candidulata*, *Haw. Lep. Brit.* 352.

*Phalæna albulata*, *Berl. Mag.* iv. 6, 616 ; *Naturf.* xi. 88, 96.

*Asthena candidaria*, *Hübner. Verz. Schm.* 310, 2987.

*Acidalia candidata*, *Treit. Schm.* vi. 2, 31, 19. *Dup. Lep.* v. 92, pl. 176, f. 4. *Boisd. Ind.* 225, 1885. *Delah. Schm.* 178.

*Asthena candidata*, *Steph. Ill. Brit. Haust.* iii. 301. *Guen. Phal.* i. 435, 718.

*Hydrelia candidaria*, *Herr.-Sch. Eur. Schm.* iii. 110, 12.

a—l. England. From Mr. Stephens' collection.

m—q. England.

r, s. Europe. From M. Becker's collection.

## 3. ASTHENA ANSERARIA.

*A. candidatæ affinis ; alæ lineis pallidioribus magis flavescens et macularibus, linea exterior non duplicata, linea submarginali duplicata, puncto discali atro bene determinato.*

*Acidalia anseraria*, *Herr.-Sch. Eur. Schm.* iii. f. 560.

*Asthena anseraria*, *Guen. Phal.* i. 436, 719.

France.

## 4. ASTHENA NYMPHULATA.

*A. candidatæ affinis, alba; frons pallide fusca; alæ crenulatæ, ciliis brevioribus; pedes fuscescente tinctæ; alæ sericeæ, lineis parallelis indistinctis pallidissime fuscis minus undatis; anticæ sex lineatæ, linea media non duplicata; posticæ quinque lineatæ.*

*Asthena nymphulata*, Guen. *Phal.* i. 436, 720.

South Spain.

## 5. ASTHENA SYLVATA.

*Cana; alæ nigricante conspersæ, lineis denticulatis ferrugineis fuscisque, linea marginali interrupta nigricante.*

*Geometra sylvata*, Wien. *Verz.* 109, 7. *Ill. N. Ausg. dess.* i. 435, 7. *Golz. Ent. Beytr.* iii. 3, 397, 161. *Hübner. Geom.* pl. 44, f. 231. *Haw. Lep. Brit.* 329.

*Hydrelia sylvata*, *Hübner. Verz. Schm.* 322, 3105.

*Hydrelia sylvaria*, *Herr.-Sch. Eur. Schm.* iii. 110, 13.

*Acidalia sylvata*, *Treit. Schm.* vi. 2, 15, 9. *Dup. Lep.* v. 412, pl. 198, f. 4. *Boisd. Ind.* 224, 1884. *Delah. Schm.* 179.

*Phalæna testacea*, *Donov. Brit. Ins.* xiv. pl. 487, f. 1.

*Asthena sylvata*, Guen. *Phal.* i. 437, 721.

*Emmelesia sylvata*, *Steph. Ill. Brit. Haust.* iii. 301, 13.

*a—g.* England. From Mr. Stephens' collection.

*h, i.* England.

## 6. ASTHENA BLOMERI.

*Cinerea; alæ nigro subconsersæ, linea marginali interrupta nigra; anticæ lineis nigricantibus valde interruptis, fascia interiore plagaque antica submarginali intus nigro marginata rufo-ferrugineis; posticæ fasciis exteriori et submarginali diffusis obscure cinereis.*

*Melanippe Blomeri*, *Curt. Brit. Ent.* pl. 416.

*Emmelesia Blomeri*, *Steph. Ill. Brit. Haust.* iv. 393.

*Acidalia pulchraria*, *Fuchs. Eversm. Bull. Mosc.* 1842, 3; *Faun. Volg.-Ural.* 424. *Frey. Beitr.* pl. 390, f. 1.

*Hydrelia pulchraria*, *Herr.-Sch. Eur. Schm.* iii. 111, 17.

*Asthena Blomeraria*, Guen. *Phal.* i. 437, 322.

*a—e.* England. From Mr. Stephens' collection.

*f.* England.

## North America.

## 7. ASTHENA LUCATA.

Fœm. *A. sylvatæ* simillima, ejusdem var. ? ; frons obscurior ; alæ anticæ lineis duabus nigricantibus fasciolaque intermedia fusca magis sinuatis et remotis, striga discali nigra distincta ; posticæ lineis magis determinatis.

*Asthena lucata*, Guen. *Phal.* i. 437, 723.

Canada.

## 8. ASTHENA ONDINATA.

*Pallide glauco-viridis ; caput saturate rufum ; vertice albo ; ala gutta discali saturate viridi, lineis quinque exterioribus nonnullisque interioribus albidis parallelis subundulatis, fimbria alba ; anticæ costa fuscescente.*

*Asthena ordinata*, Guen. *Phal.* i. 438, 724, pl. 19, f. 4.

*Chlorochroma plurilineata*, Cat. *Lep. Het.* 563, 8.

a. Tasmania. From Mr. A. J. Smith's collection.

b, c. Sydney. From Mr. Diggles' collection.

d, e. Australia. From Mr. Damel's collection.

f. New Zealand. Presented by Dr. Sinclair.

g—i. New Zealand. Presented by Col. Bolton.

The Australian and the New Zealand specimens of *A. ordinata* have evidently a common origin, but the latter have more exterior lines on the wings than the former, and may therefore be termed a subspecies.

## 9. ASTHENA RISATA.

Fœm. *Pallide carnea ; caput rufescens ; alæ lineis plurimis roseo-carneis parallelis denticulatis, puncto discali punctisque marginalibus minimis nigris ; anticæ trigonæ, margine exteriori convexo ; posticæ angulo interiore quadrato.*

*Asthena risata*, Guen. *Phal.* i. 438, 725.

Tasmania.

a, b. Australia. From Mr. Milne's collection.

## Genus 9. EUPISTERIA.

Corpus gracile. Proboscis brevis, robusta. Palpi incumbentes, brevissimi. Antennæ breves, maris pubescentes. Abdomen carinatum. Tibiæ posticæ non incrassatæ, calcaribus quatuor longis approximatis. Alæ integræ, spissæ; anticæ latæ, margine exteriori convexo; posticæ margine exteriori angulato utrinque subconcavo.

*Euchoeca*, Hübn. Verz. Schm. 298.

*Fidonia*, p., Treit.; Dup.

*Emmelesia*, p., Steph.

*Eupisteria*, Boisd. Ind. 192. Guen. Phal. 438.

*Cidaria*, p., Leder.

Body slender. Proboscis short, robust. Palpi incumbent, very short. Antennæ short, very minutely pubescent in the male. Abdomen keeled; anal valves of the male with conical points. Hind tibiæ not incrassated, with two approximate pairs of long spurs. Wings entire, stout. Fore wings broad; exterior border convex. Hind wings with the exterior border slightly concave on each side of the middle angle.

## 1. EUPISTERIA HEPARATA.

*Flavescente-cinerea; alæ ferrugineo conspersæ et lineatæ et extus suffusæ, fimbria ferrugineo notata.*

*Geometra heparata*, Wien. Verz. 116, 8. Ill. N. Ausg. deu. i. 475, 8.

*Phalæna hepararia*, Schr. Faun. Boic. ii. 2, 39, 1671.

*Geometra hepararia*, Hübn. Geom. pl. 11. f. 58. Haw. Lep. Brit. 343.

*Enchoeca hepararia*, Hübn. Verz. Schm. 298, 2881.

*Geometra oblitterata*, Hüfn. Bork. Eur. Schm. v. 118.

*Fidonia hepararia*, Treit. Schm. vi. 264, 2. Dup. Lep. iv. 435, pl. 166, f. 7. Sepp, Schm. vi. pl. 32, f. 1—7.

*Eupisteria hepararia*, Boisd. Ind. 192, 1520.

*Emmelesia heparata*, Steph. Ill. Brit. Haust. iii. 302, 16.

*Hydrelia hepararia*, Herr.-Sch. Eur. Schm. iii. 111, 15.

a—f. England. From Mr. Stephens' collection.

g, h. England. From Mr. Stevens' collection.

i—k. England.

## Genus 10. VENUSIA.

Corpus sat gracile. Frons magna, globosa; vertex rotundatus. Proboscis brevis. Palpi graciles, remoti, brevissimi. Tibiæ posticæ graciles, quadricaratae. Alæ tenues, integræ. Alæ anticæ latæ, trigonæ, lineis distinctis; posticæ rotundatæ. *Mas.*—Antennæ ramis parvis clavatis pubescentibus. Abdomen longum, gracile. *Fem.*—Antennæ crenulatæ.

*Venusia*, *Curt. Brit. Ent.* 759; *Guen. Phal.* i. 440.

*Eubolia*, p., *Boisd.*; *Dup.*

*Hydrelia*, *Herr.-Sch.*

Body rather slender. Front large, globose; vertex rounded. Proboscis short. Palpi slender, far apart, very short. Hind tibiæ slender, with two pairs of spurs. Wings delicate, entire. Fore wings broad, triangular, with distinct line. Hind wings rounded. *Male.*—Antennæ with short claviform pubescent branches. Abdomen long, slender, with prominent anal valves. *Female.*—Antennæ crenulated.

## 1. VENUSIA CAMBRICARIA.

*Canæ*; alæ subconspersæ, fasciis diffusis fuscescentibus, lunulis marginalibus nigris; anticæ lineis tribus punctularibus nigris.

*Venusia cambricaria*, *Curt. Brit. Ent.* pl. 416. *Guen. Phal.* i. 440, 727.

*Eubolia erutaria*, *Boisd. Ind.* 203, 1624. *Dup. Lep. Suppl.* iv. 45, pl. 54, f. 4.

*Hydrelia erutaria*, *Herr.-Sch. Eur. Schm.* iil. 111, 16.

a, b. England. Presented by F. Bond, Esq.

c—k. England. From Mr. Stephens' collection.

l, m. England. From Mr. King's collection.

n. England.

## Genus 11. CLETA.

Corpus robustum. Frons rudis, squamosa. Proboscis gracillima. Palpi breves, recti, hirsuti; articuli indistincti. Abdomen conicum. Pedes breves; tibiæ posticæ bicalcaratæ. Alæ integræ, non latæ nec angulatæ. *Mas.*—Antennæ ramis pubescentibus, apice acutissimæ. *Fem.*—Antennæ moniliformes.



*Acidalia*, p., *Treit.*; *Boisd.*; *Leid.*

*Cleta*, *Dup. Cat. Lep.* 271; *Guen. Phal.* i. 441.

*Emmiltis*, p., *Hüb. Verz. Schm.* 309; *Herr.-Sch.*

Body robust. Front rough, squamous. Proboscis very slender. Palpi short, straight, hirsute; joints indistinct. Abdomen conical. Legs short; hind tibiae with one pair of spurs. Wings entire, not large nor angular; the usual lines; the space between them generally pale. *Male*.—Antennae with pubescent more or less long branches, terminating in a long very acute point. *Female*.—Antennae moniliform.

### 1. CLETA VITTARIA.

*Saturate fusca; alae lineae submarginali maculari lutescente; antica fascia latissima lutescente nigro interlineata et marginata; postica fascia angusta undulata lutescente.*

*Geometra vittaria*, *Hüb. Geom.* pl. 83, f. 429.

*Emmiltis vittaria*, *Hüb. Verz. Schm.* 309, 2976. *Herr.-Sch. Eur. Schm.* iii. 32, 94.

*Acidalia vittaria*, *Treit. Schm.* vi. 2, 11, 8. *Dup. Lep.* vi. 86, pl. 175, f. 8. *Lucas, Espl. Algér.* 306. *Boisd. Ind.* 223, 1858.

*Cleta vittaria*, *Dup. Guen. Phal.* i. 442, 729.

Spain. Dalmatia. Algeria.

### 2. CLETA PERPUSILLARIA.

*Lutescens; alae ciliis concoloribus, fascia marginali fusca lutescente maculata; antica strigis basali et media fuscis; postica striga interna punctoque medio fuscis.*

*Acidalia perpusillaria*, *Everm. Bull. Soc. Imp. Nat. Mosc.* xx. 3, 82, 20, pl. 6, f. 7. *Herr.-Sch. Eur. Schm. Sup.* 70, f. 462.

*Cleta perpusillaria*, *Guen. Phal.* i. 442, 730.

Lower Volga Region.

### 3. CLETA PYGMÆARIA.

*Cervino-cinerea; alae lineis interiora, exteriora et marginali, linea media lata fasciaeque submarginali fuscis, fimbria fusco interlineata, puncto distali nigricante.*

*Geometra pygmæaria*, *Hüb. Geom.* pl. 65, f. 335.

*Acidalia pygmæaria*, *Treit. Schm.* vi. 2, 10, 4. *Dup. Lep.* vi. 84, pl. 175, f. 7.

*Acidalia parvularia*, *Boisd. Ind.* 223, 1857. *Delah. Schm.* 61.

*Emmiltis pygmæaria*, *Herr.-Sch. Eur. Schm.* iii. 32, 92.

*Phalæna minutaria*? *Fabr. Ent. Syst.* iii. 2, 163, 121.

*Cleta pygmæaria*, *Guen. Phal.* i. 443, 731.

Italy. Carniola.

#### 4. CLETA EPIONARIA.

**Mas.** — *Violaceo-fusca*; antennæ ramis cinereo conspersis; alæ disco testaceo-cinereo consperso, margine exteriori flexo; antica acutæ, lineis tribus nebulosis, puncto discali fulvo, fimbria antica apice alba; posticæ bilineatæ, rotundatæ, angulo interiore quadrato. **Fœm.** — *Obecurior, nigricante-fumosa, puncto discali, macula costali subapicali lineolaque marginali ferrugineo-fuscis.*

*Cleta epionaria*, *Guen. Phal.* i. 441, 728.

Brazil.

#### 5. CLETA SPOLIATARIA.

**Mas.** *Sordide alba*; frons fusco-cinerea; antennæ ramis usque ad apices decrescentibus; alæ lineis parallelis subundulatis margineque exteriori pallide argillaceo-flavis; antica quinque lineatæ, angulo interiore nullo; posticæ breves, trilineatæ.

*Cleta spoliataria*, *Guen. Phal.* i. 443, 733.

Cayenne.

#### North Africa.

#### 6. CLETA CIRTANARIA.

*Alba*; alæ antica subcinereæ, vitta basali alba utrinque fusco marginata; posticæ fusco trivittatæ.

*Acidalia cirtanaria*, *Lucas, Expl. Algér. Anim. Artic.* iii. 396, 143, pl. 4, f. 3.

*Cleta cirtanaria*, *Guen. Phal.* i. 443, 732.

Constantina.

#### Genus 12. ACIDALIA.

Corpus gracile. Proboscis mediocris. Palpi graciles, brevissimi. Antennæ maris sæpissime breviusculæ, pubescentes, ciliatæ aut pectinatæ; fœm. filiformes aut vix pubescentes. Thorax suboblongus. Alæ integræ, læves, sericæ, sat validæ, rotundatæ aut

angulatae, puncto discali saepissime conspicuo, lineis plurimis. *Mas.*  
—Tibiae posticae saepissime tumidae, calcaribus duobus aut nullis.

*Sterrha*, *Pycitia*, *Cosmorhoe*, *Dosithea*, *Arrhostia*, *Leptomeris*, *Hübner*.  
*Verz. Schm.* 308—312.

*Acidalia* et *Idæa*, *Treit. Schm.*

*Acidalia*, p., *Dup.*; *Boisd.*; *Herr.-Sch.*; *Leder.*

*Acidalia*, *Ptychopoda* et *Emmelesia*, *Steph.*

Body slender. Proboscis moderately long. Palpi slender, very short. Antennæ generally rather short, pubescent, ciliated or pectinated in the male, filiform or hardly pubescent in the female. Thorax slightly oblong. Wings entire, smooth, silky, rather stout, rounded or angular, traversed by numerous lines, almost always with a discal point. *Male*.—Hind tibiae generally tumid, without spurs or with only one pair.

### Europe.

The European species of this genus have been divided by Guenée into twenty groups, most of which have been formed into genera by other authors. These genera are here omitted, as their limits are uncertain, and as many species lately discovered in various parts of Europe are not yet to be met with in any collections of this country.

Group 1. *Sterrha*, *Hübner*. *Verz. Schm.* 309.

Group 2. *Pycitia*, *Hübner*. *Verz. Schm.* 309.

Group 3. *Emmiltis*, p., et *Leptomeris*, p., *Hübner*. *Verz. Schm.* 309, 310.

Group 4. *Craspedia*, p., *Hübner*. *Verz. Schm.* 312. *Idæa*, p., *Treit.*

Group 5. *Emmiltis*, p., et *Leptomeris*, p., *Hübner*. *Verz. Schm.* 309, 310.

Group 6. *Emmiltis*, p., *Hübner*. *Verz. Schm.* 308.

Group 7. *Ptychopoda*, *Steph.* *Craspedia*, p., *Hübner*. *Lomographa*, p., *Hübner*. *Verz. Schm.* 311. *Eois*, p., *Hübner*. *Verz. Schm.* 308.

Group 8. *Arrhostia*, p., *Hübner*. *Verz. Schm.* 311.

Group 9. *Craspedia*, p., *Hübner*. *Verz. Schm.* 312.

Group 10. *Mesoleuca*, p., et *Cosmorhoe*, p., *Hübner*. *Verz. Schm.* 326.

Group 11. *Eois*, p., *Hübner*. *Verz. Schm.* 308.

Group 12. *Leptomeris*, p., *Hübner*. *Verz. Schm.* 310.

Group 13. *Arrhostia*, p. *Hübner*. *Verz. Schm.* 311.

- Group 14. *Emmiltis*, p., et *Craspedia*, p., *Hübner. Verz. Schm.* 300, 312.  
 Group 15. *Arrhostia*, p., *Hübner. Verz. Schm.* 311.  
 Group 16. *Leptomeris*, p., *Hübner. Verz. Schm.* 310.  
 Group 17. *Asthena*, p., *Hübner. Verz. Schm.* 310.  
 Group 18. *Calothyrsanis*, p., *Hübner. Verz. Schm.* 301.  
 Group 19. *Arrhostia*, p., *Hübner. Verz. Schm.* 311.  
 Group 20. *Cepphis*, p. *Hübner. Verz. Schm.* 294. *Ania*, *Steph.*

## Group 1.

## 1. ACIDALIA SERICEATA.

*Alba; alæ anticæ fasciis sex subundulatis fuscis, fascia 6a submarginali postice abbreviata; posticæ puncto discali lineisque tribus exterioribus cervinis.*

*Geometra sericeata*, *Hübner. Geom.* pl. 78, f. 404.

*Sterrha sericearia*, *Hübner. Verz. Schm.* 309, 2979.

*Acidalia sericeata*, *Treit. Schm.* vi. 2, 36, 24. *Dup. Lep.* v. 434, pl. 201, f. 4. *Boisd. Ind.* 225, 1388.

*Emmiltis sericearia*, *Herr.-Sch. Eur. Schm.* iii. 32, 91. *Delah. Schm.* 60.

South and East Europe.

## Group 2.

## 2. ACIDALIA AUREOLARIA.

*Saturate lutea; alæ lineis media et exteriori subparallelis vix undulatis nigricantibus, linea marginali tenuissima, fimbria sordide lutescente nigricante interlineata; anticæ lineæ interiori nigricante, costa nigro conspersa.*

———, *Geoffr. Ins.* ii. 128, 38. *De Vill. Ent. Linn.* ii. 325, 475.

*Geometra aureolaria*, *Wien. Verz.* 1028. *Schr. Faun. Boic.* ii. 2, 9, 1619. *Bork. Eur. Schm.* v. 64, 28. *Ill. N. Ausg. dess.* i. 393, 8. *Hübner. Geom.* pl. 12, f. 62.

*Phalæna aureolaria*, *Fabr. Ent. Syst.* iii. 2, 161, 115.

*Pycis aureolaria*, *Hübner. Verz. Schm.* 309, 2980.

*Acidalia aureolaria*, *Treit. Schm.* vi. 2, 266, 6. *Dup. Lep.* v. 88, pl. 176, f. 2. *Boisd. Ind.* 223, 1862. *Herr.-Sch. Eur. Schm.* iii. 27, 74. *Delah. Schm.* 48. *Guen. Phal.* i. 446, 735.

Europe.

## 3. ACIDALIA FLAVEOLARIA.

*Saturate lutea; alæ lineis media et exterioribus tenuiore subrectis subparallelis nigricante-purpureis, fimbria sordide ochracea nigricante interlineata; antica linea interiore tenui subundulata nigricante-purpurea.*

*Geometra flaveolaria*, Hübn. *Geom.* pl. 66, f. 341.

*Pyctis flaveolaria*, Hübn. *Verz. Schm.* 309, 2981.

*Idæa flaveolaria*, Treit. *Schm.* x. 2, 221.

*Acidalia flaveolaria*, Dup. *Lep.* v. 87, pl. 176, f. 1. *Boisd. Ind.* 223, 1861. *Herr.-Sch. Eur. Schm.* iii. 27, 76. *Leder, Schm.* 91. *Delah. Schm.* 49. *Guen. Phal.* i. 447, 736.

*Phalæna brunnearia?* Fabr. *Ent. Syst.* iii. 2, 162, 119.

a—c. Europe. From M. Becker's collection.

## 4. ACIDALIA FILACEARIA.

*Lutea; A. flaveolaris affinis; alæ breviores, lineis duabus nigricantibus gracillimis vix undulatis, fimbria lata nigricante cinereo aut flavo-varia; antica linea interiore nonnunquam subobsoleta. Mas.—Antennæ ramis usque ad apices pubescentibus.*

*Acidalia filacearia*, Herr.-Sch. *Eur. Schm.* iii. 27, 75, f. 392, 393. *Leder. Geom.* 92. *Guen. Phal.* i. 447, 737.

Alps of South Europe.

## Group 3.

## 5. ACIDALIA PEROCHRARIA.

*Læte ochracea; alæ lineis quatuor subundulatis fimbriaque obscurioribus; antica puncto discali nullo; tibiæ maris et fœm. bicalcuratæ.*

*Geometra ochrearia?* Hübn. *Geom.* pl. 20, f. 110.

*Emmiltis ochrearia?* Hübn. *Verz. Schm.* 309, 2974.

*Acidalia ochrearia*, var., Treit. *Schm.* x. 2, 202. *Frey, Beitr.* pl. 66, f. 3.

*Acidalia ochrearia?* Dup. *Lep.* v. 76, pl. 175, f. 3. *Boisd. Ind.* 223, 1863.

*Acidalia perochraria*, *Fisch.-v.-R.* 46, 125, pl. 49. *Eversm. Faun. Volg.-Ural.* 397. *Herr.-Sch. Eur. Schm.* iii. 19, 43. *Dalsh. Schm.* 28. *Guen. Phal.* i. 448, 738.

Germany. Switzerland.

a, b. Europe. From M. Becker's collection.

#### 6. ACIDALIA EXILARIA.

*Argillaceo-fulvescens*, *A. perochrariae* affinis, minor; alæ antice acutæ, lineis tribus sinuatis parallelis ferrugineis linea 4a submarginali informi nigricante, margine exteriori obliquo subrecto; posticæ lineis duabus indistinctis.

*Acidalia exilaria*, *Boisd. MSS.* *Guen. Phal.* i. 449, 739.

Central France.

#### 7. ACIDALIA OCHRATA.

*Lutescens*; alæ lineis quatuor ochraceis denticulatis diffusis indistinctis.

———, *De Vill. Ent. Linn.* iv. 511.

*Phalaena ochrata*, *Scop. Ent. Carn.* 227, 567. *Müll. Zool. Dan. Prodr.* 129, 1489.

*Geometra ochreata*, *Wien. Verz.* 110, 20. *Ill. N. Ausg. dess.* i. 440, 20. *Bork. Eur. Schm.* v. 321, 150. *Schr. Faun. Boic.* ii. 2, 33, 1660.

*Phalaena ochreata*, *Fabr. Ent. Syst.* iii. 2, 201, 265.

*Geometra pallidaria*? *Hübner. Geom.* pl. 18, f. 96.

*Leptomeris pallidaria*? *Hübner. Verz. Schm.* 311, 2996.

*Acidalia ochrearia*, *Treit. Schm.* vi. 2, 6, 1. *Fisch.-v.-R.* 45, 127, pl. 50, f. 1. *Herr.-Sch. Eur. Schm.* iii. 20, 45. *Dalsh. Schm.* 30.

*Acidalia pallidaria*, *Dup. Lep.* v. 73, pl. 75, f. 1. *Curt. Brit. Ent.* pl. 384. *Boisd. Ind.* 223, 1865.

*Acidalia ochrata*, *Guen. Phal.* i. 449, 741.

a—c. England. Presented by S. Stevens, Esq.

d. England. From Mr. Stephens' collection.

e—o. England. From Mr. Bouchard's collection.

## 8. ACIDALIA RUFULARIA.

*Ochraceo-rufescens*, *A. perochrariæ* affinis, duplo aut triplo major lineis duabus ferrugineis bene determinatis, linea submarginali indeterminata; antennæ maris pectinatae, albido annulatae, ramis nigris.

*Acidalia rufularia*, *Eversm. Bull. Soc. Imp. Nat. Mosc.* 1851, xxiv. 641, 28. *Guen. Phal.* i. 450, 742.

Eastern Siberia.

## 9. ACIDALIA RUFARIA.

*Pallidissime testacea*; caput ferrugineum, vertice albo; alæ lineis quatuor ochraceis, 4a diffusa, puncto discali nigricante.

*Geometra rufaria*, *Hübner. Geom.* pl. 21, f. 112.

*Leptomeris rufaria*, *Hübner. Verz. Schm.* 310, 2992.

*Acidalia rufaria*, *Treit. Schm.* vi. 2, 7, 2. *Dup. Lep.* v. 75, pl. 175, f. 2. *Frey. Beitr.* i. pl. 66, f. 4, 5. *Fisch.-v.-R.* 129, pl. 50, f. 2. *Boisd. Ind.* 223, 1864. *Herr.-Sch. Eur. Schm.* iii. 19, 44. *Delah. Schm.* 29. *Guen. Phal.* i. 451, 745. *Hornig, Bot. Zool. Ver. Wien.* ii. 151.

Europe.

## 10. ACIDALIA CONSANGUINARIA.

*A. rufariæ* simillima, pallidior; vertex albus; alæ magis nitentes, lineis pallidioribus, punctis discalibus et marginalibus nigris distinctis; anticæ linea submarginali postice magis recurva.

*Acidalia consanguinaria*, *Leder. Geom.* 92. *Guen. Phal.* 451, 746.

Dalmatia. Brusa.

## Group 4.

## 11. ACIDALIA SYLVESTRARIA.

*Canescens*; caput et thorax antice cervina; alæ nigricante subconspersæ, lineis quatuor testaceis, 3a 4aque nebulosis subdentatis, punctis marginalibus nigris; antica linea interiore nebulosa.

*Geometra pallidata?* *Wien. Verz. Bork. Eur. Schm.* v. 325, 168. *Ill. N. Ausg. dess.* i. 440, 21.

*Acidalia pallidaria?* *Treit. Schm.* vi. 2, 34, 21. *Herr.-Sch. Eur. Schm.* iii. 19, 42, pl. 19, f. 110, 111. *Delah.* 452, 747.

*Acidalia sylvestraria*, Dup. *Lep.* v. 108, pl. 177, f. 8. *Boisd. Ind.* 223, 1895. *Guen. Phal.* i. 452, 747.

*Acidalia modestaria*? *Ramb. Boisd. Ind.* 226, 1902.

*Acidalia antiquaria*? *Herr.-Sch. Eur. Schm.* iii. 20, 47, pl. 56, f. 340, 341.

a. Europe. From M. Becker's collection.

## 12. ACIDALIA ASELLARIA.

*Rufescente-cinerea; alæ lineis tribus undulatis nigricantibus, 3a diffuse marginata, puncto discali nigro.*

*Acidalia asellaria*, *Herr.-Sch. Eur. Schm.* iii. 18, 39, pl. 56, f. 342, 343. *Guen. Phal.* i. 453, 748.

Corsica.

## 13. ACIDALIA MONILIATA.

*Albida; alæ nigricante subconsersæ, puncto discali nigro, lineis duabus undulatis nigricantibus, spatio marginali testaceo guttas albas includente, linea marginali nigricante, fimbria nigricante punctata et interlineata; antica linea exteriori undulata nigricante.*

———, *De Vill. Ent. Linn.* iv. 509.

*Geometra moniliata*, *Wien. Verz.* 117, 9. *Ill. N. Ausg. dess.* i. 480, 9. *Hübner. Geom.* pl. 12, f. 59.

*Phalæna moniliata*, *Fabr. Ent. Syst.* iii. 2, 196, 245.

*Craspidia moniliaria*, *Hübner. Verz. Schm.* 312, 3013.

*Idæa moniliata*, *Treit. Schm.* vi. 2, 290, 20.

*Acidalia moniliata*, Dup. *Lep.* v. 68, pl. 174, f. 5. *Boisd. Ind.* 222, 1847. *Herr.-Sch. Eur. Schm.* iii. 20, 46. *Delah. Schm.* 31. *Guen. Phal.* i. 453, 749.

Europe.

## Group 5.

## 14. ACIDALIA RUBRICATA.

*Roseo-rufescens; alæ lineis media et exteriori fuscis parallelis subundulatis subdenticulatis, linea submarginali cinerea undulata, linea marginali tenui fuscescente; antica linea interiori fusca.*

———, *De Vill. Ent. Linn.* iv. 510.

*Geometra rubricata*, *Wien. Verz.* 110, 19. *Ill. N. Ausg. dess.* i. 439, 19. *Bork. Eur. Schm.* v. 323, 152. *Hübner. Geom.* pl. 21, f. 111.



*Phalaena rubricata*, *Fabr. Ent. Syst.* iii. 2, 201, 264.

*Phalaena rubiginata*, *Berl. Mag.* iv. 6, 610, 77; *Naturf.* xi. 83, 77.

*Emmiltis rubricaria*, *Hüb. Verz. Schm.* 309, 2973.

*Acidalia rubricaria*, *Treit. Schm.* vi. 2, 8, 3. *Dup. Lep.* v. 94, pl. 176, f. 5, 6. *Boisd. Ind.* 223, 1886. *Herr.-Sch. Eur. Schm.* iii. 22, 54. *Deluh. Schm.* 34. *Guen. Phal.* i. 454, 753.

*Ptychopoda rubricata*, *Steph. Ill. Brit. Haust.* iii. 303, 11, pl. 31, f. 1.

a. England. From Mr. Stephens' collection.

b, c. Europe. From M. Becker's collection.

#### 15. ACIDALIA TURBIDARIA.

*Rufescens*; *alæ conspersæ*, *linea interiore sat lata*, *linea exteriorē lineisque duabusque submarginalibus denticulatis nigris*; *antica linea media*; *postica puncto discali nigro*.

*Geometra turbidaria*, *Hüb. Geom.* pl. 97, f. 501.

*Leptomeris turbidaria*, *Hüb. Verz. Schm.* 311, 2999.

*Acidalia turbidaria*, *Herr.-Sch. Eur. Schm. Sup.* 69, f. 472. *Boisd. Ind.* ? 223, 1867. *Guen. Phal.* i. 455, 754.

Ronda, Grenada.

#### 16. ACIDALIA MACRARIA.

*Ochraceo-cinerea*; *alæ nigro subconsersæ*, *puncto discali nigro*, *lineis exteriorē submarginali et marginali nigricantibus*, *linea exteriorē tremula*, *umbra adhuc exteriorē nigricante*, *linea submarginali undulata*; *antice acutæ*, *linea interiorē flexa*.

*Acidalia macilentaria*? *Boisd. Ind.* 224, 1876. *Herr.-Sch. Eur. Schm.* iii. 20, 48, pl. 38, f. 230, 231.

*Acidalia macraria*, *Guen. Phal.* i. 455, 755.

Hyerès? Spain?

#### Group 6.

#### 17. ACIDALIA CIRCUITARIA.

*Testaceo-cinerea*; *alæ nigro conspersæ*, *fasciis media et submarginali margineque exteriorē obscurioribus*, *linea exteriorē lineaque marginali nigris*; *antice linea interiorē nigra flexa*.

*Geometra circuitaria*, *Hüb. Geom.* pl. 97, f. 499.

*Emmiltis circuitaria*, *Hüb. Verz. Schm.* 309, 2975.

*Acidalia circuitaria*, Dup. *Lep. Sup.* iv. 55, pl. 54, f. 13. Boisd. *Ind.* 223, 1856. Herr.-Sch. *Eur. Schm.* iii. 18, 39, pl. 38, f. 232, 233. Guen. *Phal.* i. 456, 756.

South Europe. Turkey. Amasia.

#### 18. ACIDALIA INCLINATA.

*Fumoso-alba*; *alæ* lituris argillaceo-fuscis, linea submarginali pallida undulata informi fusco marginata, lineola marginali fusca, spatio medio ex parte fusco tincto, puncto discali minimo; anticae spatio basali fuscescente, linea interiore arcuato-undulata. Mas.—*Antennæ* dentatæ, ciliatæ. Fœm.—*Minor*; *alæ* angustiores.

*Acidalia inclinata*, Leder. *Faun. Cypr. Beyr.* 33, pl. 3, f. 2. Guen. *Phal.* i. 456, 757.

Syria.

#### 19. ACIDALIA SULPHURARIA.

Mas.—*Sulphureo-flava*; *frons* nigra; *antennæ* vix ciliatæ; *tibiæ* posticæ appressæ, *calcaribus* nullis; *alæ* lituris pallide fuscis, linea exteriori tenui undulata, umbra submarginali duplicata, puncto discali minimo; anticae acutæ, linea interiore recta obliqua costam versus flexa, umbra media tenui. Fœm.—*Alæ* anticae subrufescentes, lineis magis rectis et determinatis, umbra media minus sinuata, umbris submarginalibus subæqualibus; posticæ puncto discali nullo.

*Geometra sulphuraria*, Frey. *N. Beitr.* pl. 516.

*Acidalia sulphuraria*, Herr.-Sch. *Eur. Schm. Sup.* 68. Leder. *Geom.* 93. Guen. *Phal.* i. 457, 758.

Fœm.? *Acidalia ochroleucaria*, Herr.-Sch. *Eur. Schm.* iii. f. 469, 470.

Sarepta.

#### 20. ACIDALIA IMMISTARIA.

*Sulphureo-flava*; *frons* atra; *antennæ* pubescentes; *tarsi* postici *tibiis* vix breviores; *alæ* lineis duabus fuscis tremulis bene determinatis, hac punctata subrecta, puncto discali atro, umbra media tenui, umbris duabus submarginalibus vix conspicuis, punctis marginalibus minimis.

*Acidalia immistaria*, Herr.-Sch. *Eur. Schm. Sup.* 68, f. 467, 468. Guen. *Phal.* i. 457, 759.

Elizabethopolis.

## 21. ACIDALIA ALBICERARIA.

*Straminea ; alæ lineis media, et exteriori et submarginali duplicata ferrugineis vix dentatis, puncto discali punctisque marginalibus nigris.*

*Acidalia albiceraria*, Herr.-Sch. Eur. Schm. iii. 23, 59, pl. 3, f. 17, 18. Guen. Phal. i. 458, 760.

Middle Europe.

## 22. ACIDALIA OCHROLEUCARIA.

*Maa. Pallide ochracea ; frons fusca ; tibiæ posticæ fere albæ, calcaribus nullis ; tarsi postici femoribus non breviores ; alæ rotundatæ, lituris nigris, puncto discali distincto, lineis interiore et exteriori bene determinatis, hac denticulata, umbra media conspicua.*

*Acidalia ochroleucata*, Herr.-Sch. Eur. Schm. iii. 24, 60, pl. 3, f. 19—21. Guen. Phal. i. 458, 761.

Cyprus.

## 23. ACIDALIA INUSTARIA.

*Rufescento-straminea ; alæ lineis tribus obscurioribus dentatis, puncto discali punctisque marginalibus nigris, fimbria nigro conspersa.*

*Acidalia inustata*, Herr.-Sch. Eur. Schm. iii. 24, 61, pl. 3, f. 15. Guen. Phal. i. 459, 763.

Vienna.

## Group 7.

## 24. ACIDALIA SCUTULATA.

*Sordide cana ; alæ nigricante subconspersa, puncto discali nigro, lineis fusciscentibus, linea interiore diffusa, linea exteriori nigro punctata, linea submarginali vix conspicua, punctis marginalibus nigris ; anticæ spatio marginali postico nigricante lineam pallidam angulosam includente. Var.—Alæ spatio marginali fuscescente interlineato.*

———, De Vill. Ent. Linn. iv. 511.

*Geometra scutulata*, Wien. Verz. 117, 12. Ill. N. Aug. dess. i. 48, 12. Bork. Eur. Schm. v. 522, 266.

*Phalæna dimidiata*, Berl. Mag. iv. 6, 602, 57 ; Naturf, xi. 78, 57.

*Phalæna scutata*, *Fabr. Ent. Syst.* iii. 2, 202, 271.

*Geometra scutularia*, *Hübner. Geom.* pl. 14, f. 72.

*Craspedia scutularia*, *Hübner. Verz. Schm.* 312, 3014.

*Acidalia scutulata*, *Treit. Schm.* vi. 2, 288, 19. *Boisd. Ind.* 222, 1850. *Herr.-Sch. Eur. Schm.* iii. 15, 25. *Delah. Schm.* 15. *Guen. Phal.* i. 460, 765.

*Dosithea scutularia*, *Duponch. Hist. Nat. Lép. Fr.* v. 1, 556, pl. 210, f. 4. *Audouin, Ann. Soc. Ent. Fr.* iii. 417, pl. 9, f. 1—5.

*Geometra lividata*, *Haw. Lep. Brit.* 353.

*Venilia lividata*, *Steph. Ill. Brit. Haust.* iii. 306, 4.

a—l. England. From Mr. Stephens' collection.

m—o. England. From Mr. King's collection.

p—r. England.

s, t. Europe. From M. Becker's collection.

## 25. ACIDALIA LÆVIGATA.

*Cinerea; alæ lineis 2a 4aque obscurioribus, la 3aque nigris, 3a undulata apud venas incrassata.*

———, *De Vill. Ent. Linn.* iv. 569.

*Phalæna lævigata*, *Scop. Ent. Carn.* 230, 575. *Fabr. Ent. Syst.* iii. 2, 197, 247.

*Geometra lævigata*, *Wien. Verz.* 117, 10. *Ill. N. Ausg. dess.* i. 481, 10. *Hübner. Geom.* pl. 14, f. 74.

*Lomographa lævigaria*, *Hübner. Verz. Schm.* 311, 3006.

*Acidalia lævigata*, *Treit. Schm.* vi. 2, 291, 21. *Dup. Lep.* v. 65, pl. 174, f. 6. *Boisd. Ind.* 223, 1853. *Herr.-Sch. Eur. Schm.* iii. 15, 23. *Guen. Phal.* i. 460, 766.

*Acidalia bellata*, *Frey. Beitr.* iv. pl. 323, f. 4.

France. Austria.

## 26. ACIDALIA MANTUARIA.

*Acidalia manicaria*, *Herr.-Sch. Eur. Schm. Sup.* 67, f. 471. *Guen. Phal.* i. 461, 769.

The characters of this species are omitted, there being no accessible description or figure of it.

Andalusia.

## 27. ACIDALIA POLITARIA.

*Flavescente-albida ; alæ nitentes, lineis duabus subundulatis, puncto discali punctisque marginalibus nigris, spatio lato marginali cinereo-submetallico.*

*Geometra politaria*, Hübn. *Geom.* pl. 12, f. 61.

*Eois politaria*, Hübn. *Verz. Schm.* 208, 2971.

*Idæa politata*, Treit. *Schm.* x. 2, 225.

*Acidalia politaria*, Dup. *Lep.* v. 58, pl. 174, f. 3. *Boisd. Ind.* 223. 1852. *Herr.-Sch. Eur. Schm.* iii. 18, 38, pl. 55, f. 337. *Guen. Phal.* i. 461, 770.

South France. Italy. Hungary.

## 28. ACIDALIA BISETATA.

*Sordide albida ; alæ puncto discali nigro, lineis fuscescentibus, linea interiore tenui undulata indistincta, linea exteriori denticulata bene determinata, maculis adhuc exterioribus fuscescentibus, linea submarginali nebulosa ; anticæ costæ dimidio basali fuscescente.*

*Phalæna bisetata*, Hüfn. *Berl. Mag.* iv. 6, 618, 101 ; *Naturf.* xi. 89, 101.

*Geometra bisetata*, Bork. *Eur. Schm.* v. 524, 267.

*Geometra scutulata*, Sepp, *Schm.* v. pl. 8, f. 1—9.

*Acidalia bisetata*, Treit. *Schm.* vi. 2, 287, 18. *Herr.-Sch. Eur. Schm.* iii. 16, 29. *Delah. Schm.* 20. *Guen. Phal.* i. 462, 771.

*Geometra dilutata* ? Haw. *Lep. Brit.* 353, 117.

*Acidalia reversaria*, Dup. *Lep.* v. 57, pl. 173, f. 3.

*Ptychopoda fimbriolata*, Steph. *Ill. Brit. Haust.* iii. 306, 2.

*Ptychopoda cinereata*, Steph. *Ill. Brit. Haust.* iii. 306, 3.

*Acidalia bisetaria*, var., *Boisd. Ind.* 222, 1851.

a—n. England. From Mr. Stephens' collection.

o—r. England.

s. Europe. From M. Becker's collection.

## 29. ACIDALIA REVERSATA.

*Pallide testaceo-cinerea ; alæ gutta discali nigra, linea interiore indistincta, linea exteriori nigra denticulata bene determinata, linea submarginali angulosa incompleta, fimbria basi nigro*

*punctata* ; anticæ maculis inter lineas exteriorē et submarginalem purpurascente-cinerascentibus.

*Acidalia reversata*, Treit. Schm. ii. 286, 17. Herr.-Sch. Eur. Schm. iii. 15, 26. Delah. Schm. 16. Guen. Phal. i. 463, 772.

*Geometra scutularia*, Hübn. Geom. pl. 14, f. 73.

*Geometra trigeminata*, Haw. Lep. Brit. 354.

*Acidalia bisetaria*, Dup. Lep. v. 53, pl. 173, f. 4.

*Venilia bisetata*, Steph. Ill. Brit. Haust. iii. 307, 5. Boisd. Ind. 222, 1851.

a—e. England. From Mr. Stephens' collection.

f—h. England.

i. Europe. From M. Becker's collection.

### Group 8.

#### 30. ACIDALIA CONTIGUARIA.

*Rufescente-cinerea* ; alæ nigro conspersæ, lineis tribus undulatis cervino marginatis, guttis submarginalibus punctisque marginalibus nigris ; anticæ costa cervina, puncto discali nigro.

*Geometra contiguaria*, Hübn. Geom. pl. 20, f. 105.

*Arrhostia contiguaria*, Hübn. Verz. Schm. 311, 3008.

*Idæa contiguata*, Treit. Schm. x. 2, 224.

*Acidalia contiguaria*, Dup. Lep. v. 59, pl. 174, f. 1? Boisd. Ind. 221, 1840. Herr.-Sch. Eur. Schm. iii. 25, 65. Delah. Schm. 41. Guen. Phal. i. 464, 774.

England. France. Germany.

#### 31. ACIDALIA TYPICATA.

*Pallidissime testaceo-cinerea* ; alæ nigro conspersæ, lineis interiore et exteriorē nebulosis approximatis parallelis, umbra submarginali indeterminata, strigis marginalibus nigris, fimbria basi cinereo punctata ; anticæ puncto discali parvo ; posticæ puncto discali magno.

*Acidalia typicata*, Guen. Phal. i. 464, 775.

French Alps.

#### 32. ACIDALIA CONSOLIDATA.

*A. typicatæ affinis* ; thorax antice fusco non marginatus ; tibiæ posticæ fasciculatæ ; tarsi postici brevissimi ; antennæ maris

*articulis trigonis pubescentibus ; alæ punctis fimbriæ nigris magnis.*

*Acidalia consolidata*, Leder. Geom. 93. Guen. Phal. i. 465, 776.

Brussa.

### Group 9.

#### 33. ACIDALIA HERBARIATA.

*Cinerea ; alæ subiridescentes, nigricante subconspersæ, puncto discali nigro, lineis quinque undulatis fuscescentibus, la 4aque nebulosis, punctis marginalibus nigris. Var. — Alæ spatio basali fuscescente.*

*Phalæna herbariata*, Fabr. Ent. Syst. Suppl. 278, 279.

*Geometra pusillaria*, Hübn. Geom. pl. 19, f. 99.

*Craspedia pusillaria*, Hübn. Verz. Schm. 312, 3015.

*Acidalia pusillaria*, Treit. Schm. vi. 2, 11, 6. Dup. Lep. v. 67, pl. 173, f. 5. Fisch.-v.-R. 163, pl. 61.

*Acidalia microsaria*, Boisd. Ind. 222, 1846. Herr.-Sch. Eur. Schm. iii. 14, 22. Delah. Schm. 13.

*Acidalia herbariata*, Guen. Phal. i. 465, 777.

France. Germany. Sicily.

#### 34. ACIDALIA SUBSATURATA.

*Mas. A. herbariatæ affinis, major ; frons et vertex concolores ; antennarum dentes robusti, ciliis longissimis fasciculati ; tarsi postici longiores ; alæ obscuriores, lituris fusco-cinereis, linea exteriori fere nigra apud costam subrecta, punctis marginalibus nigris optime determinatis ; posticæ puncto discali supra obsoleto subtus conspicuo.*

*Acidalia subsaturata*, Guen. Phal. ii. 542.

South France.

#### 35. ACIDALIA INCOMPTARIA.

*Albido-fulva ; alæ subpulverulentæ, fasciis quatuor parallelis valde sinuatis strigulaque apicali fuscis.*

*Acidalia incomptaria*, Ramb. Boisd. Ind. 222, 1845. Guen. Phal. i. 465, 778.

South France.

## Group 10.

## 36. ACIDALIA FILICATA.

*Cana ; alæ subiridescentes, gutta discali nigra, linea exteriorè diffusa indistincta cinerea ; anticæ spatio basali lineisque interiorè et mediâ nigricante-cinereis.*

*Geometra filicata*, Hübn. *Geom.* pl. 46, f. 238.

*Mesoleuca filicata*, Hübn. *Verz. Schm.* 326, 3251.

*Acidalia filicata*, Treit. *Schm.* vi. 2, 45, 30. Dup. *Lep.* 49, pl. 173, f. 6. Boisd. *Ind.* 222, 1848. Herr.-Sch. *Eur. Schm.* iii. 14, 21. Guen. *Phal.* i. 466, 779.

South France. Italy. Austria.

## 37. ACIDALIA RUSTICATA.

*Cinereo-albida ; corpus fuscens ; alæ chalybæo conspersæ, puncto discali nigro, lineis duabus undulatis nigricantibus, lineâ submarginali cinerea diffusa indistincta, fimbria basi nigro punctata ; anticæ basi spatioque inter lineas nigro-fuscis.*

———, De Vill. *Ent. Linn.* iv. 507.

*Geometra rusticata*, Wien. *Verz.* 113, 15. Ill. N. *Ausg. dess.* i. 457, 15. Bork. *Eur. Schm.* v. 399, 195. Hübn. *Geom.* pl. 46, f. 241. Haw. *Lep. Brit.* 364.

*Phalæna rusticata*, Fabr. *Ent. Syst.* iii. 2, 189, 218.

*Cosmorrhoe rusticata*, Hübn. *Verz. Schm.* 326, 3256.

*Geometra minutata?* Fabr. *Ent. Syst.* iii. 2, 205, 280.

*Acidalia rusticata*, Treit. *Schm.* vi. 2, 44, 29. Dup. *Lep.* v. 54, pl. 174, f. 4. Boisd. *Ind.* 222, 1849. Herr.-Sch. *Eur. Schm.* iii. 21, 49. Delah. *Schm.* 32. Guen. *Phal.* i. 466, 780.

*Emmelesia rusticata*, Steph. *Ill. Brit. Haust.* iii. 300, 12.

*Acidalia vulpinaria*, Herr.-Sch. *Eur. Schm. Sup.* 65, f. 473, 474.

a. England. Presented by E. Shepherd, Esq.

b—j. England. From Mr. Stephens' collection.

k—m. England.

## Group 11.

## 38. ACIDALIA OSTRINARIA.

*Subochracea ; vertex albus ; alæ lineis duabus undulatis purpureis ; anticæ lineâ exteriorè undulata bene determinata, costæ dimidio basali spatioque marginali postico purpureis ; posticæ saturatiores, purpureo-marginatæ.*



*Geometra ostrinaria*, Hübn. *Geom.* pl. 83, f. 430.

*Eois ostrina*, Hübn. *Verz. Schm.* 308, 2969.

*Acidalia ostrinaria*, Dup. *Lep. Sup.* iv. 47, pl. 54, f. 7. *Boisd. Ind.* 223, 1859. *Herr.-Sch. Eur. Schm.* iii. 28, 78, pl. 38, f. 234, 235. *Guen. Phal.* i. 467, 782.

South France. Italy. Spain.

## Group 12.

### 39. ACIDALIA OSSEATA.

*Canæ ; alæ puncto discali nigro, lineis quatuor undulatis cervinis.*

———, *De Vill. Ent. Linn.* iv. 511.

*Geometra osseata*, Wien. *Verz.* 110, 22. *Ill. N. Ausg. dess.* i. 441, 22. *Bork. Eur. Schm.* v. 326, 154. *Hübn. Geom.* pl. 19, f. 102.

*Phalæna osseata*, Fabr. *Ent. Syst.* iii. 2, 204, 276.

*Leptomeris ossearia*, Hübn. *Verz. Schm.* 310, 2994.

*Acidalia osseata*, Treit. *Schm.* vi. 2, 32, 20. *Dup. Lep.* v. 104, pl. 177, f. 5. *Boisd. Ind.* 224, 1877. *Herr.-Sch. Eur. Schm.* iii. 18, 36. *Delah. Schm.* 24. *Guen. Phal.* i. 467, 784. *Steph. Ill. Brit. Haust.* iii. 309, 1.

a. England. Presented by W. R. H. Jordan, Esq.

b, c. England. Presented by E. Shepherd, Esq.

d—r. England. From Mr. Stephens' collection.

s—u. England.

w. Europe. From M. Becker's collection.

### 40. ACIDALIA INTERJECTARIA.

*A. osseatæ affinis ; vertex stramineo-alba ; frons nigro-fusca ; alæ pallidiores, magis nitentes, margine exteriori magis sinuato ; anticæ costa fusca.*

*Acidalia interjectaria*, *Boisd. Ind.* 224, 1879. *Herr.-Sch. Eur. Schm.* iii. 18, 37, pl. 14, f. 78, 79. *Delah. Schm.* 25. *Guen. Phal.* i. 468, 785.

France.

### 41. ACIDALIA HOLOSERICATA.

*Pallide cinerea ; alæ sericeæ, puncto discali nigro minimo, lineis quinque indistinctis testaceo-cinereis.*

*Acidalia holosericeata*, Dup. *Lep. Sup.* iv. 109, pl. 59, f. 7. *Herr.-Sch. Eur. Schm.* iii. 19, 41, pl. 14, f. 80, 81. *Delah. Schm.* 26. *Guen. Phal.* i. 468, 786.

*Acidalia stramentata* ? *Eversm. Faun. Volg.-Ural.* 401.

a. England. Presented by E. Shepherd, Esq.

b—d. England. From Mr. Stephens' collection.

e. England.

#### 42. ACIDALIA ARGILATA.

*Fœm.* A. holosericeatæ affinis, major, pallide ochraceo-cinerea, viridescens sublinctâ, lineis vix obscurioribus parallelis æqualibus diffusis subundulatis, puncto discali parvo, punctis marginalibus nullis.

*Acidalia argilata*, *Guen. Phal.* i. 469, 787.

South France.

#### Group 13.

#### 43. ACIDALIA ATTENUARIA.

*Cinereo-rufa* ; alæ elongatæ, lineis obliquis transversis punctoque fuscis ; posticæ emarginatæ.

*Dosithea attenuaria*, *Ramb. Ann. Soc. Ent. Fr.* 1832, ii. 37, pl. 2, f. 19.

*Acidalia attenuaria*, *Boisd. Ind.* 224, 1874. *Guen. Phal.* i. 472, 796.

South France. Corsica.

#### 44. ACIDALIA LEDERERATA.

*Sordide carnea* ; vertex albus ; frons nigra ; antennæ moniliformes, vix pubescentes ; tibiæ posticæ tarsique alba ; alæ subangustæ, nigro conspersæ, puncto discali nigro, linea exteriori nigricante bene determinata, umbris duabus submarginalibus vagis, fimbria nigro-plumbea basi nigro punctata ; anticæ productæ ; posticæ subsinuatæ.

*Acidalia Ledererata*, *Guen. Phal.* i. 475, 805.

Corsica.

## 45. ACIDALIA MONADARIA.

**Mas.** *Albida, minima; frons nigra; antennæ submoniliformes; alæ nigro conspersæ, puncto discali nigro, fimbria nigro conspersa; anticæ elongatæ, lineis duabus valde remotis, margine exteriori subrecto; posticæ breves.*

*Acidalia Monadaria*, Guen. *Phal.* i. 475, 806.

*Tarsus*, Anatolia.

## 46. ACIDALIA ACCESSARIA.

*A. incanariæ affinis; alæ magis rufescentes, guttis inter lineas exteriorem et submarginalem saturatioribus rotundatis.*

*Acidalia accessaria*, Herr.-Sch. *Eur. Schm. Sup.* 64, f. 533.

*Acidalia recessaria*, Guen. *Phal.* i. 476, 808.

Europe?

Guenée hints that this may be an exotic species.

## 47. ACIDALIA INCANATA.

*Albido-cinerea; alæ fusco conspersæ, puncto discali nigro, lineis media et exteriori fuscescentibus, hac nigro punctata, spatio marginali cinereo lineam albidam undulatam includente, fimbria nigro punctata; anticæ linea interiori e punctis tribus nigris.*

———, *De Vill. Ent. Linn.* ii. 350, 538?

*Geometra incanata?* *Wien. Verz.* 117, 7. *Ill. N. Ausg. dess.* i. 479, 7. *Mull. Faun. Fridr.* 51, 447; *Zool. Dan. Prodr.* 128, 1474.

*Geometra incanaria*, Hübn. *Geom.* pl. 20, f. 106.

*Geometra seriata?* *Schr. Faun. Boic.* 1701.

*Geometra moniliata?* *Bork. Eur. Schm.* v. 520, 260.

*Geometra virgularia*, Hübn. *Geom.* pl. 19, f. 104. *Haw. Lep. Brit.* 354.

*Geometra lævigaria*, Sepp, *Schm.* vi. pl. 14, f. 1—10.

*Arrhostia incanaria*, Hübn. *Verz. Schm.* 312, 3010.

*Acidalia incanata*, Treit. *Schm.* vi. 2, 281, 14. *Dup. Lep.* v. 63, pl. 173, f. 7. *Boisd. Ind.* 222, 1841. *Herr.-Sch. Eur. Schm.* iii. 16, 27. *Delah. Schm.* 17. *Guen. Phal.* i. 476, 810.

*Acidalia canteneraria*, *Boisd. Ind.* 222, 1842.

*Acidalia calcearia*, Herr.-Sch. *Eur. Schm. Sup.* 65, f. 437.

*Acidalia virgularia*, Steph. *Ill. Brit. Haust.* iii. 310, 3.

- a—l.* England. From Mr. Stephens' collection.  
*m.* England. From Mr. Bouchard's collection.  
*n—q.* England.  
*r—v.* Europe. From M. Becker's collection.  
*u.* Italy. From Dr. Leach's collection.

#### 48. ACIDALIA PALEACATA.

*A. incanariæ* var. ? ; *alæ pallidiores, nitidiores, magis stramineæ, nigro vix conspersæ, lineis distinctioribus, umbra media magis concisa et lineari; anticæ minus productæ; posticæ minus rotundatæ.*

*Geometra dilataria*? *Hübner. Geom. pl. 19, f. 100.*

*Leptomeris dilataria*? *Hübner. Verz. Schm. 310, 2995.*

*Acidalia colonaria*? *Herr.-Sch. Eur. Schm. Sup. 67, f. 534.*

*Acidalia paleacata*, *Guen. Phal. i. 478, 811.*

Iles d'Hyères.

#### 49. ACIDALIA INFIRMARIA.

*Pallide subcinerea; alæ fusco rubroque variæ, strigis fuscis transversis, fimbria interna serie duplici punctorum nigrorum, margine exteriori sinuato.*

*Dosithea infirmaria*, *Ramb. Ann. Soc. Ent. Fr. 1832, ii. 36, pl. 2, f. 18.*

*Acidalia infirmaria*, *Guen. Phal. i. 478, 812.*

Corsica.

#### 50. ACIDALIA EFFLORATA.

*A. incanariæ affinis; antennæ graciliores, minus pubescentes; tibiæ posticæ sericeæ, fasciculas ochraceas includentes; tarsi postici obsoleti; alæ pallidiores, magis flavescens, minus conspersæ, lineis gracillimis valde remotis minus integris, umbra media nulla, puncto discali distincto, linea marginali e strigulis vix divisis; posticæ breviores.*

*Idæa efflorata*, *Zell. Ent. Zeit. Stett. x. 218, 136.*

*Acidalia efflorata*, *Guen. Phal. i. 478, 813.*

*Acidalia extarsaria*, *Herr.-Sch. Sup. 67, f. 435.*

Tuscany. Corsica. Sicily.

## 51. ACIDALIA TROGLODYTARIA.

*A. effloratæ affinis, minima ; tibiæ posticæ bicalcaratæ.*

*Acidalia troglodytaria*, Herr.-Sch. Eur. Schm. Sup. 66, f. 434. Guen. Phal. i. 479, 814.

Candia.

## 52. ACIDALIA SODALIARIA.

*Alba ; alæ fusco conspersæ, puncto discali nigro bene determinato, lineis interiore et exteriori fuscis dentatis, lineis media et submarginali minus determinatis, punctis marginalibus nigris elongatis.*

*Acidalia sodaliaria*, Herr.-Sch. Eur. Schm. Sup. 65, f. 466. Guen. Phal. i. 479, 815.

Dalmatia.

## 53. ACIDALIA CAMPARIA.

*Sordide alba ; alæ flavescente subinctæ, puncto discali sat magno, lineis latis umbratis, linea interiore non arcuata, umbra media distincta, linea exteriori punctiformi, umbra submarginali conspicua interrupta, umbra 3a marginali ; anticæ lineis apud costam dilatatis.*

*Acidalia camparia*, Herr.-Sch. Eur. Schm. Sup. 65, f. 465. Guen. Phal. i. 479, 816.

Smyrna. Beyrout.

## 54. ACIDALIA ARIDATA.

*Osseo-alba ; frons nigra ; tibiæ posticæ appressæ ; tarsi postici brevissimi ; alæ atomis nonnullis nigris, puncto discali parvo, fimbria basi nigro punctata, lineis tenuissimis, linea exteriori sæpe interrupta aut punctata.*

*Acidalia aridata*, Zell. Isis. 1847. Herr.-Sch. Eur. Schm. Sup. 65, f. 407, 408. Guen. Phal. i. 480, 817.

Sicily. Syria.

## 55. ACIDALIA ELONGARIA.

*Cinereo-rufescens ; frons atra ; antennæ maris vix pubescentes ; alæ nigro subconsersæ, puncto discali nigro, lineis interiore et exteriori vix conspicuis lineaque marginali pallide fuscis,*

*fimbria nigro punctata ; antice sat angustæ, productæ ; posticæ rotundatæ, deinde contractæ, angulo interiore quadrato.*

*Acidalia elongaria*, Ramb. Ann. Soc. Ent. Fr. ii. 38, pl. 20, f. 20.  
Guen. Phal. i. 480, 818.

South France. Corsica.

#### 56. ACIDALIA OBSOLETARIA.

*Cinereo-rufa ; alæ lineis quatuor sinuatis undulatis fuscis puncto discali punctisque marginalibus nigris.*

*Acidalia obsoletaria*, Ramb. Ann. Soc. Ent. Fr. ii. 39, pl. 2, f. 21.  
Dup. Lep. Sup. iv. 52, pl. 54, f. 10. Boisd. Ind. 224, 1872.  
Herr.-Sch. Eur. Schm. iii. 16, 31, pl. 31, f. 190, 191. Guen.  
Phal. i. 481, 819.

*Acidalia rufularia*, Herr.-Sch. Eur. Schm. iii. 17, 32, pl. 14, f. 84, 86.  
South France. Austria. Spain. Corsica.

#### 57. ACIDALIA PINGUEDINARIA.

*A. aridatæ affinis ; alæ magis albæ, minus conspersæ, lineis minus determinatis, punctis marginalibus conspicuis ; antice subtus nigro minus suffusæ ; antennæ articulis trigonis pubescentibus.*

*Acidalia pinguedinaria*, Zell. Isis, 1847. Herr.-Sch. Eur. Schm.  
Sup. 65, f. 405, 406. Guen. Phal. i. 481, 820.

Messina.

#### 58. ACIDALIA CIRCELLATA.

*Mas. Subfumoso-alba ; vertex albus ; frons nigra ; antennæ graciles, subpubescentes ; tibiæ posticæ appressæ ; alæ rufæ conspersæ, puncto marginali punctisque marginalibus nigris distinctissimis, lineis conspicuis, linea exteriori sinuata denticulata, umbris duabus submarginalibus.*

*Acidalia obsoletaria*, Wood, Ind. Ent. Sup. f. 1738.

*Acidalia circellata*, Guen. Phal. i. 482, 821.

Manchester.

#### 59. ACIDALIA FRACTILINEATA.

*Subochracea ; frons concolor ; alæ spatio marginali rufescente lineam submarginalem pallidiorem includente, lituris subtus bene determinatis ; posticæ lineis valde sinuatis, margine exteriori sut inciso.*

*Acidalia fractilineata*, Zell. *Isis*, 1847. *Herr.-Sch. Eur. Schm. Sup.* 66, f. 405, 406. *Guen. Phal.* i. 482, 821.

Catania.

#### Group 14.

##### 60. ACIDALIA ORNATA.

*Alba* ; *alæ puncto discali nigro, fascia marginali cinerea lineam albam angulosam includente cervino plagiata nigro intus marginata, linea media tenui nonnunquam subobsoleta, lunulis marginalibus nigricantibus.*

———, *De Vill. Ent. Linn.* ii. 362, 568.

*Phalæna ornata*, Scop. *Ent. Carn.* 219, 545. Rossi, *Faun. Etrusc.* ii. 196, 1177. *Fabr. Ent. Syst.* iii. 2, 201, 262. *Bork. Eur. Schm.* v. 462, 227.

*Geometra ornata*, Wien. *Verz.* 117, 14. *Ill. N. Ausg. dess.* i. 482, 14.

*Phalæna institata*, Hüfn. *Berl. Mag.* iv. 5, 526, 47 ; *Naturf.* xi. 74, 47.

*Geometra ornataria*, Esp. *Schm.* v. pl. 51, f. 2—4. Hübn. *Geom.* pl. 14, f. 70. Haw. *Lep. Brit.* 355.

*Craspedia ornataria*, Hübn. *Verz. Schm.* 312, 3011.

*Idæa ornata*, Treit. *Schm.* vi. 2, 283, 15.

*Acidalia ornata*, Dup. *Lep.* v. 45, pl. 173, f. 4. Boisd. *Ind.* 221, 1835. *Herr.-Sch. Eur. Schm.* iii. 25, 66. Delah. *Schm.* 42. *Guen. Phal.* i. 485, 831.

*Ptychopoda ornata*, Steph. *Ill. Brit. Haust.* iii. 307, 6.

*a—j.* England. From Mr. Stephens' collection.

*k—n.* England. From Mr. King's collection.

*o—q.* England.

*r, s.* Europe. From M. Becker's collection.

*t, v.* ——— ?

##### 61. ACIDALIA CONGRUARIA.

*A. ornatæ simillima* ; *alæ lineis magis conspicuis, umbris submarginalibus cyanescente-cinereis sat macularibus ; anticæ maculis exterioribus fuscis minimis ; posticæ maculis fuscis nullis ; antennæ minus pubescentes ; tarsi postici femoribus non breviores.*

*Acidalia congruaria*, Zell. *Isis*, 1847. *Herr.-Sch. Eur. Schm. Sup.* 69, f. 404. *Guen. Phal.* i. 485, 832.

Sicily.

## 62. ACIDALIA DECORATA.

*Alba*; *alæ puncto discali nigro, linea media diffusa undulata cinerea, spatio marginali cinerea lineam albam angulosam includente intus nigro marginata, lunulis marginalibus nigris; anticæ linea interiore undulata nigra, plagis submarginalibus nigro-fuscis.*

———, *De Vill. Ent. Linn.* ii. 577, 607.

*Geometra decorata*, *Wien. Verz.* 117, 13. *Ill. N. Ausg. dess.* i. 482, 113. *Bork. Eur. Schm.* v. 460, 226. *Hüb. Geom.* pl. 14, f. 71.

*Phalæna cinerata*, *Fabr. Ent. Syst.* iii. 2, 200, 259.

*Craspedia decoraria*, *Hüb. Verz. Schm.* 312, 3012.

*Idæa decorata*, *Treit. Schm.* vi. 2, 285, 16.

*Acidalia decorata*, *Dup. Lep.* v. 47, pl. 173, f. 2. *Boisd. Ind.* 221, 1836. *Herr.-Sch. Eur. Schm.* iii. 25, 67. *Delah. Schm.* 43. *Guen. Phal.* i. 485, 833.

a. Europe. From M. Becker's collection.

## 63. ACIDALIA CONCINNATA.

*A. ornatae affinis, major, minus alba, puncto discali cinereo, linea exteriori margineque exteriori parallelis, spatio marginali cyanescente-cinereo lineam submarginalem includente.*

*Acidalia concinnaria*, *Dup. Lep.* iv. 19, pl. 52, f. 2. *Boisd. Ind.* 221, 1834.

*Acidalia concinnata*, *Guen. Phal.* i. 486, 834.

Andalusia?

## 64. ACIDALIA NEXATA.

*Alba, minima; antennæ ciliis longissimis; alæ puncto discali nigro, lituris fuscis; anticæ linea interiore arcuata, umbra media, linea exteriori obliqua subsinuata, fascia adhuc exteriori, linea submarginali alba maculari sinuata; posticæ lineæ submarginali vaga, margine exteriori fuscescente.*

*Geometra nexata*, *Hüb. Geom.* pl. 78, f. 401; pl. 82, f. 421.

*Emmiltis nexaria*, *Hüb. Verz. Schm.* 309, 2978. *Herr.-Sch. Eur. Schm.* iii. 32, 93.

*Acidalia nexaria*, *Boisd. Ind.* 225, 1887. *Guen. Phal.* i. 486, 836.

Andalusia.



## Group 15.

## 65. ACIDALIA SUBMUTATA.

*Albida*; caput nigrum; vertex albus; tibiæ posticæ dilatatæ, non calcaratæ; alæ nigro subconspersæ, puncto discali nigro, lineis tribus undulatis cervinis, fascia exteriorē dentata cinerea, linea submarginali cervina, linea marginali tenui subinterrupta nigra; anticæ guttis quatuor costalibus nigricantibus.

*Idæa submutata*, Treit. Schm. vi. 2, 277, 12.

*Acidalia submutaria*, Boisd. Ind. 221, 1837. Herr.-Sch. Eur. Schm. iii. 25, 64, pl. 17, f. 97. Guen. Phal. i. 488, 841.

South France. Andalusia. Croatia. Dalmatia.

## 66. ACIDALIA CONFINARIA.

*Cinerascente-albida*, A. submutatæ affinis; vertex postice nigro non marginatus; tibiæ posticæ graciliores, calcari brevi; alæ fusco conferte conspersæ, puncto discali nigro, lineis tribus undulatis fuscescentibus, 2a interrupta, linea submarginali cinerea diffusa interrupta, lunulis marginalibus nigris; anticæ lineis apud costam dilatatis.

*Acidalia infirmaria*, Boisd. Ind. 224, 1875.

*Acidalia confinaria*, Herr.-Sch. Eur. Schm. iii. 21, 51, pl. 51, f. 315, 316. Guen. Phal. i. 489, 842.

Germany. Tyrol. Hungary. Dalmatia.

## 67. ACIDALIA FALSARIA.

*Albo-cinerea*, A. confinariæ affinis; frons nigricans; abdomen • nigricans, cinereo fasciatum; tibiæ posticæ graciles, bicalcaratæ; alæ ochraceo tinctæ, nigro conspersæ; anticæ lineis tribus sinuatis dentatis; posticæ umbris tribus confusis denticulatis.

*Acidalia falsaria*, Herr.-Sch. Eur. Schm. Sup. 68, f. 463, 464. Guen. Phal. i. 489, 843.

South France. Tyrol. Spain.

## 68. ACIDALIA CŒNOSARIA.

*Flavescente-carnea; tibiæ posticæ albo penicillatæ, calcaribus nullis; strigis marginalibus attenuatis.*

*Acidalia cœnosaria*, Leder. *Faun. Cyp. Beir.* 33, pl. 3, f. 3. Guen. *Phal.* i. 490, 845.

Beyrout.

## 69. ACIDALIA PROMUTATA.

*Albido-cinerea; alæ nigricante conspersæ, puncto discali nigro, lineis interiore et media vix conspicuis, linea exteriorē denticulata bene determinata, linea submarginali angulosa albida, punctis marginalibus nigris.*

———, Roes. *Ins.* i. 41, pl. 11, f. 1.

*Phalæna variegata?* Scop. *Ent. Carn.* 553.

*Geometra immutata*, Wien. *Verz.* 117, 6. Hübn. *Geom.* pl. 20, f. 108.

*Geometra marginepunctata*, Bork. *Eur. Schm.* v. 108.

*Geometra incanata*, Haw. *Lep. Brit.* 350.

*Geometra contiguaria*, Haw. *Lep. Brit.* 350.

*Arrhostia immutaria*, Hübn. *Verz. Schm.* 311, 3007.

*Idæa immutata*, Treit. *Schm.* vi. 2, 278, 13.

*Acidalia immutata*, Dup. *Lep.* v. 61, pl. 173, f. 8. Eversm. *Faun.*

*Volg.-Ural.* 440. Boisd. *Ind.* 221, 1838. Herr.-Sch. *Eur.*

*Schm.* iii. 24, 63, pl. 17, f. 101. Delah. *Schm.* 40.

*Ptychopoda incanata*, Steph. *Ill. Brit. Haust.* iii. 307, 8.

*Ptychopoda contiguaria*, Steph. *Ill. Brit. Haust.* iii. 308, 9.

*Acidalia promutata*, Guen. *Phal.* i. 491, 847.

a—h. England. From Mr. Stephens' collection.

i—j. England. From Mr. Bouchard's collection.

k, l. England.

m, n. Europe. From M. Becker's collection.

## 70. ACIDALIA BECKERARIA.

*Cinerascens, A. promutatæ affinis; frons fusca; antennæ maris filiformes, ciliis longis; alæ spatio marginali lituris vix ullis, linea submarginuli vix conspicua; alæ fimbria non notata; posticæ linea submarginali apud punctum discalē non arcuata.*

*Acidalia Beckeraria*, Leder. *Geom. Eur.* 94. Guen. *Phal.* i. 492, 848.

Elizabethopolis. Sarepta.

## 71. ACIDALIA ADJUNCTARIA.

*A. promutatæ affinis, magis alba; tibiæ posticæ quadricalcaratæ, vix incrassatæ; alæ conspersæ, linea submarginali minus sinuata, punctis marginalibus minoribus; anticæ linea exteriore magis recta minus punctiformi.*

*Acidalia adjunctaria*, *Boisd. Ind.* 225, 1896. *Guen. Phal.* i. 492, 849.

Alps of Lombardy.

## 72. ACIDALIA MUTATA.

*Cana; caput thoracisque margo anticus nigro-fusca; vertex albus; alæ nigro conferte conspersæ, puncto discali nigro, lineis fuscescentibus, lineis interiore et submarginali duplicata nebulosis indistinctis, linea exteriore denticulata magis determinata, punctis marginalibus nigris; anticæ linea media nebulosa.*

*Idæa mutata*, *Treit. Schm.* ii. 275, 11.

*Acidalia mutata*, *Eversm. Faun. Volg.-Ural.* 440? *Dup. Lep.* v. 102, pl. 177, f. 4. *Frey. N. Beitr.* pl. 54, f. 3. *Herr.-Sch. Eur. Schm.* iii. 24, 62, pl. 17, f. 98—100. *Delah. Schm.* 39. *Guen. Phal.* i. 492, 850.

a. Europe. From M. Becker's collection.

## Group 16.

## 73. ACIDALIA STRAMINATA.

*Stramineo-albida; caput nigrum, vertex albus; tibiæ posticæ bicalcaratæ; alæ lineis tribus subobscurioribus undulatis indistinctis, puncto discali punctisque marginalibus nigris.*

*Acidalia straminata*, *Treit. Schm.* x. 2, 205. *Boisd. Ind.* 224, 1880. *Herr.-Sch. Eur. Schm.* iii. 16, 28, pl. 14, f. 82, 83. *Delah. Schm.* 19. *Guen. Phal.* i. 493, 851.

*Acidalia marginepunctata*, *Steph. Ill. Brit. Haust.* iii. 310, 2.

a, b. England. Presented by F. Bond, Esq.

c, d. England. From Mr. Turner's collection.

## 74. ACIDALIA BYSSINATA.

*Alba; frons nigra; palpi et thorax flavescens-cinerei; tibiæ posticæ fœm. bicalcaratæ; alæ nigro subconspersæ, lineis tribus aut quatuor flavescens-cinereis olivaceo tinctis sinuatis bene determinatis, umbra marginali flavescens-cinerea, puncto discali punctisque marginalibus nullis; anticæ productæ, non acutæ, basi flavescens-cinerea.*

*Acidalia byssinata*, Treit. Schm. vi. 2, 36, 23. Boisd. Ind. 225, 1886. Guen. Phal. i. 494, 853.

Bararia.

## 75. ACIDALIA SUBSERICEATA.

*Viridescens-cana, sericea; caput nigrum; vertex albus; tibiæ posticæ maris incrassatæ, tarsis brevissimis; alæ lineis quatuor subobscurioribus indistinctis vix undulatis, 4a diffusa, punctis marginalibus nigris, puncto discali nigro subtus distincto; anticæ subtus bilineatæ; posticæ subtus unilineatæ.*

*Geometra subsericeata*, Haw. Lep. Brit. 352, 113.

*Acidalia subsericeata*, Steph. Ill. Brit. Haust. iii. 310, 4. Guen. Phal. i. 495, 854.

*Acidalia perfluaria*, Boisd. Ind. 226, 1903.

*Acidalia asbestaria*, Koll. Zell. Ent. Zeit. Stett. x. 216, 126. Herr.-Sch. Eur. Schm. Sup. 66. Millière, Ann. Soc. Lin. Lyon. iii.

a, b. England. From Mr. Stephens' collection.

c—i. England. From Mr. Bouchard's collection.

## 76. ACIDALIA DISTINCTARIA.

*Fœm. Cinerascens-alba; alæ sericeæ violaceo subtinctæ, puncto discali cinereo minimo, lineis duabus submarginalibus pallidis parallelis approximatis.*

*Acidalia distinctaria*, Boisd. Ind. 224, 1869. Guen. Phal. i. 496, 855.

South France.

## 77. ACIDALIA MEDIARIA.

*Albida; alæ nigro conspersæ, lineis rectis punctisque marginalibus nigris, umbra media lata; anticæ puncto discali nigro; posticæ lineis exterioribus latis.*

*Geometra mediaria*, Hübn. *Geom.* pl. 97, f. 50, 2.

*Leptomeris mediaria*, Hübn. *Verz. Schm.* 311, 2997.

*Acidalia mediaria*, Eversm. *Faun. Volg.-Ural.* 374. *Boisd. Ind.* 227, 1914. *Herr.-Sch. Eur. Schm.* iii. 21, 50. *Guen. Phal.* i. 496, 856.

South France. Italy. South Russia.

#### 78. ACIDALIA STRIGARIA.

*Ochraceo-cinerea, subolivacea; caput postice cervino marginatum; alæ nigro conspersæ, lineis olivaceo-fuscis, linea marginali fusca; anticæ lineis tribus rectis. Mas.—Tibiæ posticæ dilatatæ, non calcaratæ, tarsi longis; alæ posticæ puncto disculi nigro. Fœm.—Alæ anticæ valde acutæ.*

*Geometra strigaria*, Hübn. *Geom.* pl. 18, f. 95.

*Leptomeris sulcaria*, Hübn. *Verz. Schm.* 310, 2991.

*Acidalia strigaria*, Treit. *Schm.* vi. 2, 35, 22. *Dup. Lep.* v. 106, pl. 177, f. 6. *Eversm. Faun. Volg.-Ural.* 402. *Boisd. Ind.* 225, 1894. *Herr.-Sch. Eur. Schm.* iii. 26, 69, pl. 19, f. 114, 115. *Delah. Schm.* 45. *Guen. Phal.* i. 497, 857.

*Geometra virgulata?* Bork. *Eur. Schm.* v. 262.

South France. Germany. Switzerland.

#### Group 17.

#### 79. ACIDALIA DISSIDIATA.

*Mas. A. litigiosariæ affinis, paullo major; alæ minus conspersæ, lineis duabus mediis distinctioribus nigricantibus, 2a magis sinuata; posticæ puncto discali minori.*

*Acidalia dissidiata*, Guen. *Phal.* i. 497, 858.

South France. Andalusia.

#### 80. ACIDALIA LITIGIOSARIA.

*Mas et fœm. Flavescens-alba; frons nigra; vertex albus; tibiæ posticæ bicalcaratæ, non incrassatæ; alæ lineis nonnullis sinuatis pallidissime olivaceo-cinereis, linea media nulla, linea exterior biflexa, linea submarginali alba, puncto disculi punctisque marginalibus nigris.*

*Acidalia litigiosaria*, Ramb. *Boisd. Ind.* 226, 1899. *Dup. Lep. Sup.* iv. 46, pl. 54, f. 5. *Herr.-Sch. Eur. Schm.* iii. 16, 30, pl. 49, f. 303, 304. *Guen. Phal.* i. 498, 859.

South France. Corsica.

### 81. ACIDALIA IMMUTATA.

*Canescens*; caput nigricans, vertice albo; alæ nigro consperse, puncto discali nigro, lineis quatuor diffusis fusciscentibus, 2a exteriori nigro punctata, 3a 4aque submarginalibus, punctis marginalibus duplicatis nigris.

———, *De Vill. Ent. Linn.* ii. 350, 539.

*Phalæna-Geometra immutata*, *Linn. Syst. Nat.* i. 2, 871, 264; *Faun. Suec.* 1288. *Clerck, Icon.* pl. 6, f. 12.

*Geometra immutata*, *Bork. Eur. Schm.* v. 510, 258. *Haw. Lep. Brit.* 352, 112.

*Geometra sylvestrata*? *Bork. Eur. Schm.* v. 516, 261. *Hübner. Geom.* pl. 18, f. 97.

*Leptomeris sylvestrata*? *Hübner. Verz. Schm.* 311, 2998.

*Cabera sylvestrata*, *Treit. Schm.* vi. 2, 306.

*Acidalia sylvestrata*, *Frey. Beitr.* i. pl. 77, f. 2, 3. *Herr.-Sch. Eur. Schm.* ii. 23, 57, pl. 18, f. 103—105. *Delah. Schm.* 37.

*Acidalia cæspitaria*, *Boisd. Ind.* 225, 1897.

*Ptychopoda immutata*, *Steph. Ill. Brit. Haust.* iii. 308, 10.

*Acidalia immutata*, *Guen. Phal.* i. 498, 860.

a, b. England. Presented by Edwin Shepherd, Esq.

c—q. England. From Mr. Stephens' collection.

r. Europe. From M. Becker's collection.

### 82. ACIDALIA CARICARIA.

*Alba*; alæ nigro subconspersæ, cinereo lineatæ, puncto discali nigro bene determinato, linea interiori indistincta undulata, linea exteriori e punctis nigris, linea submarginali nebuloza duplicata, fimbria nigro punctata.

*Acidalia caricaria*, *Herr.-Sch. Eur. Schm. Sup.* 134, f. 553, 554. *Guen. Phal.* i. 499, 861.

Pyrenees. Swiss Alps.

## 83. ACIDALIA DIGNATA.

*A. immutatæ affinis, major, candidior; antennæ maris ciliis longioribus; alæ minus conspersæ, puncto discali atro bene determinato; posticæ punctis marginalibus suboblongis.*

*Acidalia dignata*, Guen. *Phal.* i. 499, 862.

Altai.

## 84. ACIDALIA NEMORARIA.

*Candida, sericea, magna; frons alba; alæ lineis tribus undulatis pallidissime fusco-flavescentibus, puncto discali nullo; posticæ margine exteriori angulato.*

*Geometra nemoraria*, Hübn. *Geom.* pl. 17, f. 89.

*Asthenes nemoraria*, Hübn. *Verz. Schm.* 310, 2964.

*Acidalia nemoraria*, Herr.-Sch. *Eur. Schm.* iii. 22, 56, pl. 17. f. 102. Delah. *Schm.* 36. Guen. *Phal.* i. 500, 864.

Germany. Austria. Switzerland.

## 85. ACIDALIA SUBPUNCTARIA.

*Mas. Nivea; frons atra; antennæ subdentatæ, vix pubescentes; tibiæ posticæ incrassatæ, longissimæ, tarsi brevissimis; alæ vix conspersæ, lineis ferruginosis, linea exteriori angulata, puncto discali punctisque marginalibus minimis, illo nonnunquam obsoleto. Fœm.—Alæ minus niveæ, magis conspersæ, lineis magis determinatis.*

———, *De Vill. Ent. Linn.* ii. 362.

*Phalæna punctata*, Scop. *Ent. Carn.* 543.

*Geometra punctata*, Bork. *Eur. Schm.* v. 246.

*Acidalia punctaria*, Dup. *Lep.* v. 100, pl. 177, f. 3. Boisd. *Ind.* 226, 1898.

*Acidalia subpunctaria*, Herr.-Sch. *Eur. Schm.* iii. 23, 58, pl. 51, f. 311—313.

*Acidalia cerusaria*, Delah. *Schm.* 38.

*Acidalia depunctata*, Guen. *Phal.* i. 500, 865.

South France. Austria. Switzerland.

## 86. ACIDALIA REMUTATA.

*Canescens; caput nigricans, vertice albo; thoracis margo anticus fuscus; alæ nigricante conspersæ, puncto discali nigro, lineis tribus fuscescentibus nebulosis, linea marginali nigra apud venas interrupta; antica linea 4a exteriori nigricante punctata; posticæ subangulatæ.*

*Geometra* inspersata? *Schr. Faun. Boic.* ii. 2, 1700.

*Geometra* remutaria, *Hübner. Geom.* pl. 18, f. 98.

*Asthena* remutaria, *Hübner. Verz. Schm.* 310, 2985.

*Geometra* floslactata, *Haw. Lep. Brit.* 351.

*Geometra* lactata, *Haw. Lep. Brit.* 351.

*Geometra* sublactata, *Haw. Lep. Brit.* 351.

*Idæa* remutata, *Treit. Schm.* vi. 2, 273, 10.

*Acidalia* remutata, *Dup. Lep.* v. 98, pl. 177, f. 2. *Boisd. Ind.* 226, 1907. *Herr.-Sch. Eur. Schm.* iii. 22, 55, pl. 15, f. 86—90. *Delah. Schm.* 35. *Guen. Phal.* i. 501, 866.

*Acidalia* lactata, *Steph. Ill. Brit. Haust.* iii. 313, 10.

*Acidalia* floslactata, *Steph. Ill. Brit. Haust.* iii. 313, 11.

*a—t.* England. From Mr. Stephens' collection.

*v, u.* England.

*w.* Europe. From M. Becker's collection.

## 87. ACIDALIA COMMUTATA.

*Sordide cinerea; frons nigra; vertex albus; tibiæ posticæ maris graciles, bicalcaratæ; alæ nigro conferte conspersæ, lineis quatuor pallide cervinis vix undulatis, linea submarginali diffusa; antica linea interiore.*

*Acidalia* commutata, *Frey. N. Beitr.* i. 13, 143, pl. 77, f. 4. *Boisd. Ind.* 226, 1906. *Herr.-Sch. Eur. Schm.* iii. 22, 53, pl. 16, f. 91—96. *Delah. Schm.* 33. *Guen. Phal.* i. 502, 867.

*Idæa* commutata, *Treit. Schm.* x. 2, 222.

*Acidalia* fumata, *Steph. Ill. Brit. Haust.* iii. 312, 9.

*Acidalia* nitidaria, *Boisd. Ind.* 226, 1904.

*Acidalia* gypsaria, *Boisd. Ind.* 226, 1905.

*a.* England. Presented by Edwin Shepherd, Esq.

*b—g.* England. From Mr. Stephens' collection.

*h—j.* England.



## 88. ACIDALIA UMBELARIA.

*Alba, sat magna; alæ nigro subconspersæ, lineis media et exteriori subtestaceis parallelis subundulatis, linea submarginali vix conspicua; posticæ puncto discali nigro.*

*Geometra umbelaria*, Hübn. *Geom.* pl. 85, f. 437, 438.

*Leptomeris umbelaria*, Hübn. *Verz. Schm.* 310, 2990.

*Acidalia compararia*, Herr.-Sch. *Eur. Schm.* iii. 26, 70, pl. 49, f. 299, 302. *Leder. Geom. Eur.* 94. *Delah. Schm.* 46.

*Acidalia umbelaria*, Guen. *Phal.* i. 502, 868.

Austria. Switzerland.

## Group 18.

## 89. ACIDALIA STRIGILATA.

*Cinerea; frons nigra; vertex albus; alæ nigro conspersæ, fusco lineatæ, linea interiore indistincta, fascia media bene determinata, lineis exteriori et submarginali subdentatis, puncto discali lineaque marginali tenui interrupta nigris; posticæ angulatæ. Mas.—Antennæ ciliatæ; tibiæ posticæ incrassatæ, non calcaratæ.*

*Geometra strigilata*, Wien. *Verz.* 117, 4. *Schr. Faun. Boic.* ii. 2, 55, 1696. *Ill. N. Ausg. dess.* i. 479, 4; *N. Mag.* ii. 177, 4. *Hübn. Geom.* pl. 20, f. 109.

*Phalæna mediata?* Fabr. *Ent. Syst.* iii. 2, 198, 252. *Schr. Faun. Boic.* v. 1696.

*Geometra nemorata*, Bork. *Eur. Schm.* v. 518, 263.

*Calothyssanis exemptaria*, Hübn. *Verz. Schm.* 301, 2906.

*Eunomos strigilata*, Treit. *Schm.* vi. 25, 11.

*Acidalia strigilata*, Dup. *Lep.* v. 96, pl. 177, f. 1. *Frey. Beitr.* pl. 144, f. 1. *Guen. Phal.* i. 507, 879.

*Timandra variegata*, Steph. *Ill. Brit. Haust.* iii. 318, 2.

*Acidalia pratensis*, Boisd. *Ind.* 227, 1917. *Herr.-Sch. Eur. Schm.* iii. 26, 71, pl. 18, f. 108, 109. *Delah. Schm.* 47.

a, b. England. From Mr. Stephens' collection.

c, d. England.

e. Europe. From M. Becker's collection.

## 90. ACIDALIA RECTISTRIGARIA.

*A. strigilatæ affinis, flavescente-alba; alæ fusco conspersæ, puncto discali lineaque submarginali fuscis, costa subapicali lineam sat latam emittente usque ud marginem interiorem; posticæ magis angulatæ.*

*Acidalia rectistrigaria*, Eversm. Bull. Soc. Imp. Nat. Mosc. 1851, 637. Guen. Phal. i. 597, 880.

Eastern Siberia.

## 91. ACIDALIA IMITARIA.

*Cinereo-testacea; caput antice nigricans; alæ ferrugineo conspersæ, linea media nigricante subrecta valde obliqua bene determinata, linea exterior fusca tenui undulata, linea marginali tenui, puncto discali nigro; anticæ subfulcatæ, linea interiore tenui undulata fusca; posticæ angulatæ.*

*Geometra imitaria*, Hübn. Geom. pl. 10, f. 51.

*Calothyssanis imitaria*, Hübn. Verz. Schm. 301, 2905.

*Ennomos imitaria*, Treit. Schm. vi. 24, 10.

*Acidalia imitaria*, Dup. Lep. iv. 229, pl. 148, f. 4. Boisd. Ind. 227, 1912. Herr.-Sch. Eur. Schm. iii. 27, 73. Guen. Phal. i. 508, 881.

*Timandra imitaria*, Steph. Ill. Brit. Haust. iii. 318, 1.

a—i. England. From Mr. Stephens' collection.

j—l. England.

## 92. ACIDALIA FLACCIDARIA.

*Albida; alæ nigro subconsersæ, linea media cinerea nebulosa indistincta, linea exterior e punctis nigris, linea submarginali subobsoleta, punctis marginalibus nigris; anticæ puncto discali nigro parvo; posticæ angulatæ, puncto discali elongato sat magno.*

*Acidalia flaccidaria*, Herr.-Sch. Eur. Schm. f. 550, 551. Guen. Phal. i. 508, 882.

Beyrout.

## 93. ACIDALIA EMUTARIA.

*Cinereo-albida; caput nigrum, vertice albo; thorax margine antico fulvo; tibiæ posticæ subincrassatæ, non calcuratæ; alæ nigro subconsersæ, linea media indeterminata fuscescente,*

*puncto discali, linea exteriori punctulari punctisque marginalibus nigris, lineis duabus submarginalibus vix conspicuis; posticæ subangulatæ.*

*Geometra emutaria*, Hübn. *Geom.* pl. 63, f. 323.

*Calothysanis emutaria*, Hübn. *Verz. Schm.* 301, 2907.

*Ennomos emutaria*, Treit. *Schm.* vi. 27, 12.

*Geometra subroseata*, Haw. *Lep. Brit.* 351.

*Acidalia emutaria*, Dup. *Lep.* iv. 231, pl. 150, f. 3. Boisd. *Ind.* 227, 1913. Herr.-Sch. *Eur. Schm.* iii. 26, 72. Guen. *Phal.* i. 508, 883.

*Timandra emutaria*, Steph. *Ill. Brit. Haust.* iii. 318, 3.

a, b. England. From Mr. Stephens' collection.

c. England.

### Group 19.

#### 91. ACIDALIA AVERSATA.

*Sordide cinerea; vertex albus; alæ elongatæ, nigricante, conspersæ lineis duabus nigro-fuscis parallelis vix undulatis, spatio intermedio fuscescente-cinereo, linea marginali fusca interrupta; anticæ linea interiore fusca.*

———, De Vill. *Ent. Linn.* ii. 344, 527.

*Phalæna-Geometra aversata*, Linn. *Syst. Nat.* i. 2, 869, 251; *Faun. Suec.* 1286. Gmel. *ed. Syst. Nat.* i. 5, 2477, 251.

*Phalæna-Geometra lividata*, Linn. *Faun. Suec.* 1285. Clerck, *Icon.* pl. 5, f. 7.

*Phalæna-Geometra remutata*, Linn. *Syst. Nat.* i. 2, 268; *Faun. Suec.* 1289. Clerck, *Icon.* pl. 5, f. 12. Gmel. *ed. Syst. Nat.* i. 5, 2481, 266.

*Phalæna aversata*, Fabr. *Mant. Ins.* ii. 268, 200; *Ent. Syst.* iii. 2, 185, 196.

*Phalæna remutata*, Fabr. *Sp. Ins.* ii. 265, 137; *Mant. Ins.* ii. 210, 210.

*Phalæna griseata*, Fabr. *Sp. Ins.* ii. 261, 109; *Mant. Ins.* ii. 204, 161.

*Geometra aversata*, Wien. *Verz.* 113, 19. Bork. *Eur. Schm.* v. 506, 255. Fuessl. *Schw. Ins.* 40, 783. Schr. *Faun. Boic.* ii. 2, 54, 1695. Müll. *Faun. Fridr.* 51, 446; *Zool. Dan. Prodr.* 127, 1468. Ill. N. *Ausg. dess.* i. 478, 3. Sepp, *Schm.* iv. pl. 29, f. 1—5. Hübn. *Geom.* pl. 11, f. 56; pl. 75, f. 389. Haw. *Lep. Brit.* 349. Frey. *Beitr.* pl. 36, f. 1.

*Phalæna-Geometra griseata*, Gmel. *ed. Syst. Nat.* i. 5, 2471, 707.

*Geometra remutata*, Schr. *Faun. Boic.* ii. 2, 54, 1697. *Bork. Eur. Schm.* v. 506, 257. *Haw. Lep. Brit.* 349.

*Arrhostia aversata*, Hübn. *Verz. Schm.* 311, 3006.

*Idæa aversata*, Treit. *Schm.* vi. 2, 268, 8.

*Acidalia aversata*, Dup. *Lep.* v. 80, pl. 175, f. 5 6. *Steph. Ill. Brit. Haust.* iii. 311, 6. *Boisd. Ind.* 226, 1910. *Herr.-Sch. Eur. Schm.* iii. 17, 33. *Delah. Schm.* 21. *Guen. Phal.* i. 510, 887.

*Acidalia remutata*, *Steph. Ill. Brit. Haust.* iii. 312, 7.

*a—yy.* England. From Mr. Stephens' collection.

*zz—fff.* England.

*ggg—hhh.* Europe. From M. Becker's collection.

#### 95. ACIDALIA INORNATA.

*Testaceo-cinerea; caput fuscum, vertice albo; tibiæ posticæ maris incrassatæ non calcaratæ; alæ lineis tribus obscurioribus indistinctis, 3a duplicata, puncto discali nigro, linea marginali nigricante apud venas interrupta.*

*Geometra inornata*, *Haw. Lep. Brit.* 349, 103.

*Idæa suffusata*, Treit. *Schm.* vi. 2, 272, 9.

*Acidalia inornata*, *Steph. Ill. Brit. Haust.* iii. 311, 5. *Guen. Phal.* i. 511, 888.

*Acidalia suffusata*, *Eversm. Faun. Volg.-Ural.* 439. *Herr.-Sch. Eur. Schm.* iii. 17, 35, f. 305—314. *Delah. Schm.* 22.

*a—f.* England. From Mr. Stephens' collection.

*g.* England.

#### 96. ACIDALIA AGROSTEMMATA.

*Fœm. Albida, A. inornatæ et A. degenerariæ affinis; alæ anticæ magis productæ; posticæ breves, minus rotundatæ; frons fusca; alæ lineis vix conspicuis, puncto discali minimo, punctis marginalibus nullis.*

*Acidalia agrostemmata*, *Guen. Phal.* i. 512, 889.

Central France.

#### 97. ACIDALIA INOARNARIA.

*Vinoso-rosea, A. agrostemmatæ et degenerariæ affinis; anticæ costa flavescens, linea exteriori costam versus non angulata.*

*Acidalia incarnaria*, *Herr.-Sch. Eur. Schm. Sup.* 66, f. 436.  
*Guen. Phal.* i. 513, 890.

Dalmatia. Corsica.

*Geometra ruficostata*? *Zeller, Isis*, 1847, 507; *Ent. Zeit. Stett.* x. 215, 125.

*Alæ cinerascens, strigis obsoletis obscurioribus quinque, antipenultima tenui et distinctiore, puncto medio nigro; antica costa late rufescente.*

Tuscany.

#### 98. ACIDALIA DEGENERARIA.

*Fuscescente-cinerea; vertex albus; alæ lineis quatuor subundulatis fuscis, 1a 2aque diffusis distinctis, 3a 4aque vix conspicuis, puncto discali nigro; antica spatia inter lineas 1am et 2am fuscescente.*

*Geometra degeneraria*, *Hübner. Geom.* pl. 11, f. 57.

*Idæa degeneraria*, *Treit. Schm.* vi. 2, 267, 7.

*Acidalia degeneraria*, *Dup. Lep.* v. 78, pl. 175, f. 4. *Curt. Brit. Ent.* pl. 384. *Steph. Ill. Brit. Haust.* iv. 394. *Boisd. Ind.* 226, 1909. *Herr.-Sch. Eur. Schm.* iii. 15, 24, f. 339. *Guen. Phal.* i. 513, 891.

a. Isle of Portland. Presented by F. Bond, Esq.

b. ———? From Mr. Milne's collection.

#### Group 20.

#### 99. ACIDALIA EMARGINATA.

*Cinereo-testacea; vertex albus; alæ subangulatæ, puncto discali nigricante, umbra media cinerea, linea exterior subundulata lineaque marginali fuscis; antica falcata, linea interiore fusca.*

———, *De Vill. Ent. Linn.* ii. 333, 503.

*Phalæna-Geometra emarginata*, *Linn. Syst. Nat.* i. 2, 866, 236; *Faun. Suec.* 1257. *Clerck, Icon.* pl. 4, f. 12. *Gmel. ed. Syst. Nat.* i. 5, 2460, 236.

*Phalæna demandata*, *Fabr. Ent. Syst.* iii. 2, 167, 138.

*Geometra emarginata*, *Wien. Verz.* 104, 10. *Bork. Eur. Schm.* v. 123, 49. *Schr. Faun. Boic.* ii. 2, 16, 1631. *Ill. N. Ausg. dess.* i. 408, 10. *Hübner. Geom.* pl. 20, f. 107. *Haw. Lep. Brit.* 347.

*Geometra demandaria*, *Esp. Schm.* v. 104, pl. 20, f. 4—6.

*Phalæna erosata*, *Berl. Mag.* iv. 6, 526, 46.

*Phalæna rumigerata*, *Donov. Brit. Ins.* xiv. 493, f. 2, 3.

*Cepphis emarginaria*, *Hübner. Verz. Schm.* 294, 2847.

*Geometra dimidiata*, *Haw. Lep. Brit.* 347.

*Ennomos emarginata*, *Treit. Schm.* vi. 1, 28, 13.

*Epione emarginata*, *Dup. Lep.* iv. 222, pl. 150, f. 4.

*Ania emarginata*, *Steph. Ill. Brit. Haust.* iii. 322, 2.

*Acidalia emarginata*, *Boisd. Ind.* 226, 1911. *Herr.-Sch. Eur. Schm.* iii. 28, 79. *Delah. Schm.* 51. *Guen. Phal.* i. 513, 892.

*a—l.* England. From Mr. Stephens' collection.

*m—p.* England.

*q.* Europe. From M. Becker's collection.

### Group ——— ?

#### 100. ACIDALIA SUBFASCIARIA.

*Dilute murina* ; *prothorax cinereus* ; *alæ anticæ fascia media lata obsoleta obscuriore dentata, linea tenui ante apicem undulata albida, fimbria dilute fusca* ; *posticæ cinereæ, atomis albidis adpersæ, fimbria dilutior.*

*Acidalia subfasciaria*, *Boheman, Kongl. Vet. Akad. Handl.* 1853, 133.

Sweden.

#### 101. ACIDALIA FILARIA.

*Alæ cervinæ* ; *anticæ lineis transversis dentato undulatis quatuor, posticæ duabus albis.*

*Acidalia Filaria*, *Eversm. Bull. Soc. Imp. Nat. Mosc.* xxi. 3, 228, 18.

Noor Saisan District.

#### 102. ACIDALIA VITELLINARIA.

*Alæ pallide flavescences, strigis luteo-fuscis margine parallelis, anticarum quatuor, posticarum tribus.*

*Acidalia vitellinaria*, *Everm. Bull. Soc. Imp. Nat. Mosc.* xxiv. 2, 641, 29.

Eastern Siberia.

### North America.

The species of this region have been divided into the following nine groups:—

Group 1, or the 3rd European group.

Group 2, or the 4th European group.

Group 3. This group is peculiar to North America and to the West Indies, and in Guenée's arrangement it follows the 12th European group.

Group 4. This group is peculiar to North America.

Group 5, or the 13th European group.

Group 6, or the 14th European group.

Group 7, or the 16th European group.

Group 8, or the 17th European group.

Group 9, or the 18th European group.

### Group 1.

#### 103. ACIDALIA MAGNETARIA.

*Ferruginea; caput villosum; antennæ ciliis longis incurvis; tibiæ posticæ incrassatæ, fusiformes, non calcaratæ; alæ integræ, pulverulentæ, basi liturisque saturatioribus, linea media diffusa, linea exteriori denticulata, umbris duabus submarginalibus punctoque discali distinctis.*

*Acidalia magnetaria*, *Guen. Phal.* i. 450, 743.

California.

### Group 2.

#### 104. ACIDALIA BALISTARIA.

*Mas et fœm. Flavescens-carnea; antennæ maris pectinatæ; alæ lineis duabus saturatioribus parallelis subrectis vix distinctis, puncto discali, fimbria cinerascens; anticæ acutæ, linea interiori minus conspicua; posticæ carneo-albæ.*

*Acidalia balistaria*, *Guen. Phal.* i. 453, 750.

Georgia.

## Group 3.

## 105. ACIDALIA DEMISSARIA.

**Mas.** *Pallide rufo-fusca; abdomen apice flarescens; alæ puncto discali obscure fusco, fascia obliqua repanda flava; antica fasciis duabus obliquis, posticæ una obscure fuscis.*

*Eois demissaria* (*Geometra tenuis*, *Sphecoda colorata*), *Hübner. Samml. Exot. Schmett.* iii. 36, 282, f. 563, 564.

*Acidalia demissaria*, *Guen. Phal.* ii. 466, 781.

North America.

## Group 4.

## 106. ACIDALIA INSULSARIA.

**Mas.** *Subcarneo-cinerea, sericea; antenna pectinata, apices versus pubescentes; alæ lineis subflavescente-albis indistinctis strigatæ, lineis duabus submarginalibus denticulatis parallelis distinctioribus, litura discali concolori vix conspicua, punctis marginalibus nullis.*

*Acidalia insulsaria*, *Guen. Phal.* i. 469, 788.

North America.

## 107. ACIDALIA PLACIDARIA.

**Fœm.** *Carneo-cinerea; palpi ascendentes, ad frontem applicati, verticem superantes; alæ lineis tribus parallelis nigricantibus, linea submarginali nulla, puncto discali longo concolori.*

*Acidalia placidaria*, *Guen. Phal.* i. 469, 789.

North America.

## 108. ACIDALIA PANNARIA.

**Mas et fœm.**—*Rufescente-cinerea; alæ lineis tribus lutescentibus parallelis undulatis fusco pallido marginatis, striga discali oblonga, punctis marginalibus nullis. Mas.*—*Antennæ pubescentes; alæ posticæ subtus floccoso pilosæ.*

*Acidalia pannaria*, *Guen. Phal.* i. 470, 790.

North America.



## Group 5.

## 109. ACIDALIA HEPATICARIA.

**Fœm.** *Pallide testaceo-fusca; alæ rotundatæ, subtus roseo obscuro et flavescendo-albo variæ, lineis fasciisque latis obscure violaceo-rufis, puncto discali punctisque marginalibus liturisque subtus nullis.*

*Acidalia hepaticaria*, *Guen. Phal. i. 471, 793.*

Baltimore.

## 110. ACIDALIA LÆVITARIA.

**Mas.** *Testacea; alæ venis nigro punctatis, fasciis tribus obliquis rufis apud margines nigro punctatis; antica costæ basique rufis.*

*Eois lævitaria* (*Geometra tenuis*, *Sphecodes colorata*), *Geyer, Zutr. Samml. Exot. Schm. 20, 437, f. 873, 874.*

*Acidalia lævitaria*, *Guen. Phal. i. 471, 794.*

Georgia.

## Group 6.

## 111. ACIDALIA SUBLATARIA.

**Fœm.** *Pallide testaceo-cinerea; alæ angustæ, oblongæ, nigro conspersæ, lituris nigricantibus conspicuis, umbra media lutea, linea exteriori denticulata sinuata, linea submarginali minus conspicua, puncto discali distincto, fimbria alba nigro sabulosa.*

*Acidalia sublataria*, *Guen. Phal. i. 474, 803.*

North America.

## 112. ACIDALIA OSSULARIA.

**Fœm.** *Albida; corpus fusco varium; alæ gutta discali fasciaque obliquo guttulari postmedia nigris, fasciis tribus fuscis, 1a antemedialis in posticis obsoleta, 2a media, 3a subapicali; antica costæ testacea.*

*Leptomeris ossularia* (*Geometra tenuis*, *Sphecodes colorata*), *Geyer, Zutr. Samml. Exot. Schm. 27, 455, f. 909, 910.*

*Acidalia ossularia*, *Guen. Phal. i. 475, 804.*

Pennsylvania.

## 113. ACIDALIA TEMNARIA.

Mas et fœm. *Pulvereo-cinerea; frons nigro-fusca; tibiæ posticæ graciles; alæ atomis saturatioribus conspersæ, lineis interiore et exteriori indeterminatis, umbra media magis, conspicua puncto discali distincto. Mas.—Antennæ ciliatæ.*

*Acidalia temnaria*, Guen. *Phal.* i. 476, 807.

North America.

## Group 7.

## 114. ACIDALIA MYRMIDONATA.

Mas. *Alba; vertex pallide fuscus; frons nigra; antennæ subpubescentes; tibiæ posticæ albæ, appressæ; alæ linea exteriori ferrugineo-fusca, lituris submarginalibus et atomis nigro-fuscis confluentibus, puncto discali minimo, punctis marginalibus antice obsoletis; antica linea interiore fusca.*

*Craspedia lautaria?* (*Geometra tenuis*, *Sphecoda nebulosa*), Hübn. *Samml. Exot. Schmett.* iii. 33, 270, f. 539, 540.

Pennsylvania.

*Acidalia myrmidonata*, Guen. *Phal.* i. 487, 838.

North America.

## 115. ACIDALIA PURATA.

Mas. *Alba; caput nigrum; antennæ subpubescentes; alæ nigro subconsersæ, punctis marginalibus elongatis punctoque discali nigris bene determinatis, lineis interiore et exteriori fuscis undulatis, linea submarginali diffusa incompleta; antica macula apud angulum interiorem nigricante.*

*Acidalia purata*, Guen. *Phal.* i. 438, 839, pl. 7, f. 6.

a. Georgia. From Mr. Milne's collection.

## 116. ACIDALIA LUMENARIA.

*Alba; caput et thorax anticus testacea; alæ fasciis duabus submarginalibus guttisque nonnullis discalibus testaceis, punctis marginalibus nigris; antica costa testacea, puncto discali nigro.*

*Arrhostia lumenaria* (*Geometra tenuis*, *Sphecodes nubilosa*), *Geyer*,  
*Zutr. Samml. Exot. Schm.* 35, 379, f. 757, 758.

*Acidalia lumenaria*, *Guen. Phal.* i. 488, 840.

North America.

### Group 8.

#### 117. ACIDALIA INDUCTATA.

*Mas. Pallidissime ochraceo-cinerea; frons nigra; palpi apice nigri; antennæ pubescentes; alæ non conspersæ, lineis quatuor saturatioribus parallelis subundulatis, 3a obscuriore magisque dentata, puncto discali nigro; anticæ linea interiore arcuata.*

*Acidalia inductata*, *Guen. Phal.* i. 494, 852.

North America.

#### 118. ACIDALIA TACTURATA.

*Alba; tibiæ posticæ bicalcaratæ; alæ nigro subconsersæ, lineis fuscescentibus, lineis media et exteriori denticulatis, hac punctata, linea submarginali indistincta, punctis marginalibus subobsoletis; anticæ acutæ; posticæ latæ, margine exteriori subflexo, puncto discali nigro distincto.*

White. Hind tibiæ with two long spurs. Wings thinly and minutely black-speckled; lines brownish; interior line obsolete; middle line and exterior lines denticulated, the former more distinct than the latter, which is accompanied by black points; submarginal line indistinct; marginal points almost obsolete. Fore wings acute. Hind wings broad; exterior border slightly bent; discal point black, distinct. Length of the body 4 lines; of the wings 10 lines.

The specimen here recorded is mutilated, and on that account the above description is incomplete.

α. East Florida. Presented by E. Doubleday, Esq.

#### 119. ACIDALIA IMPAUPERATA.

*Fœm. Cana, fusco dense conspersa; frons nigro-fasciata; tibiæ posticæ quadricalcaratæ; alæ fusco lineatæ, linea interiore indistincta, linea media lata lineaque exteriori rectis subparallelis, linea submarginali subobsoleta, puncto discali punctisque marginalibus elongatis fuscis; anticæ apice subrotundatæ.*

*Female.* Hoary, thickly brown-speckled. Front with a black band adjoining the vertex. Hind tibiæ with four long spurs. Wings with brown lines; interior line indistinct; middle line broad, straight, passing over the discal points; exterior line also distinct and nearly parallel to the middle line; submarginal line almost obsolete; discal point and marginal points brown, the latter elongated; exterior border slightly convex. Fore wings somewhat rounded at the tips. Length of the body  $3\frac{1}{2}$  lines; of the wings 10 lines.

*Loc.* St. Martin's Falls, Albany River, Hudson's Bay. Presented by Dr. Barnston.

#### 120. ACIDALIA ORDINATA.

*Mas.* *Alba*; *caput nigrum, vertice niveo; palpi breves, ascendentes, supra nigri; antennæ subpubescentes; tibiæ posticæ incrassatæ, calcaribus tarsisque nullis; alæ non conspersæ, lineis pallide cervinis costam versus obsoletis, lineis media et exterior rectis subparallelis, lineis duabus submarginalibus indistinctis, puncto discali punctisque marginalibus nigris; anticæ acutæ, linea interiore; posticæ marginem anteriore subflexo.*

*Male.* White. Head black; vertex pure white. Palpi short, ascending, black above. Antennæ very minutely pubescent. Hind tibiæ incrassated; spurs and tarsi obsolete. Wings not speckled; lines pale fawn-colour; middle line straight, distinct, passing without the black discal point in the fore wings, and within it in the hind wings; exterior line almost parallel to the middle line and equally distinct; two slight indistinct submarginal lines; marginal points black, very minute. Fore wings acute, with an interior line, which is almost parallel to the other lines, and, like them, is obsolete towards the costa. Hind wings with the exterior border slightly bent. Length of the body 4 lines; of the wings 10 lines.

*a.* Georgia. From Mr. Milne's collection.

#### 121. ACIDALIA RESTRICTATA.

*Mas.* *Albida*; *caput nigrum, vertice albo; palpi breves, oblique ascendentes, supra nigri; antennæ pubescentes; tibiæ posticæ incrassatæ, calcaribus subobsoletis; alæ nigro subconsersæ,*

*lineis pallide cervinis, linea interiore indistincta subundulata, linea media recta distincta; linea exteriori undulata subdentata, lineis duabus submarginalibus minus determinatis, puncto discali punctisque marginalibus nigris; anticæ vix acutæ; posticæ linea exteriori subflexa.*

**Male.** Whitish. Head black; vertex white. Palpi short, obliquely ascending, black above. Antennæ pubescent. Hind tibiæ incrassated, with almost obsolete spurs; hind tarsi more than half the length of the tibiæ. Wings thinly and minutely black-speckled, with pale fawn-coloured lines; interior line indistinct, slightly undulating; middle line straight, distinct, passing without the discal point in the fore wings, and within it in the hind wings; exterior line undulating, slightly dentate; two less distinct submarginal lines, nearly parallel to the exterior line; discal point and marginal points black. Fore wings hardly acute. Hind wings with the exterior border slightly bent. Length of the body 6 lines; of the wings 14 lines.

*a, b.* Nova Scotia. From Lieut. Redman's collection.

### Group 9.

#### 122. ACIDALIA NIVOSARIA.

**Mas.** *Nivea; tibiæ posticæ fusiformes, quadricaratae; alæ anticæ subproductæ, costa convexa subtus basi nigro lineolata, margine exteriori subrotundato; posticæ margine exteriori angulato.*

*Acidalia nivosaria, Guen. Phal. i. 499, 863.*

Canada.

#### 123. ACIDALIA ENUCLEATA.

**Var.?** *Albida; caput nigrum; palpi porrecti, breves, supra nigri; alæ nigro subconspersæ, lineis testaceis, linea media indistincta, linea exteriori lineaque submarginali duplicata undulatis parallelis, plagis submarginalibus et atomis contiguis nigris.*

*Acidalia enucleata, Guen. Phal. i. 505, 874, pl. 12, f. 3.*

**Male and female.** Whitish. Head black. Palpi porrect, extending very little beyond the head, black above. Antennæ of the male very minutely pubescent. Abdomen of the male very long and slender. Hind tibiæ of the male fringed, much dilated;

hind tarsi very short. Wings thinly and minutely black-speckled, with testaceous lines; interior line obsolete; middle line indistinct; exterior line and two submarginal lines undulating, parallel to each other, accompanied by patches of confluent black atoms; discal point and marginal points black, distinct. Length of the body 5—6 lines; of the wings 14 lines.

a.—c. Canada. Presented by W. D'Urban, Esq.

#### 124. ACIDALIA COMPENSATA.

**Mas.** *Fuscescent-cinerea*; caput nigrum, vertice albo; palpi porrecti, brevissimi; antennæ pubescentes; tibiæ posticæ incrassatæ non calcaratæ; tarsi postici breves; alæ nigro conspersæ, lineis fuscis, linea interiore subobsoleta, lineis media et exteriori denticulatis, linea submarginali valde indistincta, puncto discali punctisque marginalibus atris; antica acuta; postica margine exteriori subflexo.

**Male.** Brownish cinereous. Head black; vertex white. Palpi porrect, very short. Antennæ pubescent. Hind tibiæ incrassated, without spurs; hind tarsi short. Wings black-speckled; lines brown; interior line almost obsolete, distinguished by a black mark on the costa of the fore wings; middle and exterior lines denticulated, slight, the latter ending in a black mark on the costa; submarginal line very indistinct; discal point and marginal points deep black, the former rather large. Fore wings acute. Hind wings with the exterior border slightly bent. Length of the body 3 lines; of the wings 10 lines.

a. East Florida. Presented by E. Doubleday, Esq.

#### Group 10.

#### 125. ACIDALIA TIMANDRATA.

**Mas.** *Pallide cinerea*; caput antice nigricans; palpi breves, porrecti, supra nigricantes; antennæ subpubescente ciliatæ; tibiæ posticæ valde incrassatæ, non calcaratæ; tarsi postici brevissimi; alæ amplæ, nigro subconsersæ, lineis pallide roseis, linea media valde indistincta, linea exteriori subundulata subdentata vix distincta, puncto discali nigro, margine exteriori fimbriaque roseis; antica peracutæ, costa rosea; postica margine exteriori angulato.

**Male.** Pale cinereous. Head blackish in front. Palpi short, porrect, hardly extending beyond the head, blackish above. Antennæ minutely ciliated and pubescent. Hind tibiæ much incrassated, without spurs; hind tarsi very short. Wings ample, very minutely black-speckled; lines pale rosy, a little darker than the ground hue; interior and submarginal lines obsolete; middle line very indistinct; exterior line hardly distinct, slightly undulating and dentate; discal point black, minute; exterior border and fringe rosy. Fore wings very acute; costa rosy. Hind wings with the exterior border distinctly angular. Length of the body 5 lines; of the wings 14 lines.

a. East Florida. Presented by E. Doubleday, Esq.

### West Indies.

Group 1, or the 4th European group.

Group 2, or the 7th European group.

Group 3, or the 3rd North American group.

Group 4, or the 13th European group.

Group 5, or the 14th European group.

Group 6, or the 17th European group.

Group 7, or the 19th European group.

### Group 1.

#### 126. ACIDALIA INERMARIA.

**Fœm.** *Carneo-alba, A. balistaræ valde affinis, pallidior; tibiæ posticæ calcaribus brevissimis; alæ anticæ lineis quatuor obliquis parallelis rectis; posticæ albæ, puncto discali obscuriore distinctiore, umbra media recta, lineis subtus tribus.*

*Acidalia inermaria, Guen. Phal. i. 454, 751.*

Haiti.

### Group 2.

#### 127. ACIDALIA MONOGRAMMATA.

**Mas.** *Pallidissime flavescens-cinerea; frons nigra; antennæ pubescentes; tibiæ posticæ incrassatæ, fasciculatæ; tarsi postici brevissimi; alæ linea media denticulata, puncto discali punctisque marginalibus minimis. Var.—Alæ fascia lata nigricante.*

*Acidalia monogrammata*, Guen. *Phal.* i. 463, 773.

Haiti.

128. *ACIDALIA RESTORATA*.

*Fœm.* *Cana, nigro conspersa; tibiæ posticæ quadricaratae; alæ latiusculæ, lineis tribus fuscis subrectis, spatio submarginali fuscescente-cinereo fusco-consperso lineam undulatam vix conspicuam includente, punctis marginalibus nigris; antica lineis apud costam subflexis subdilatatis, macula submarginati fusca; posticæ gutta discali nigricante.*

*Female.* Hoary, minutely black-speckled. Hind tibiæ with four spurs. Wings rather broad, with three brown nearly straight lines, which are slightly bent and dilated towards the costa of the fore wings; space between the exterior line and the border brownish cinereous, brown-speckled, paler exteriorly, including a slight undulating very indistinct submarginal line; marginal points black. Fore wings with a brown spot in the marginal space near the exterior line. Hind wings with a blackish discal dot. Length of the body 10 lines; of the wings 10 lines.

a. St. Domingo. From Mr. Tweedie's collection.

Group 3.

129. *ACIDALIA PHORCARIA*.

*Violaceo-carnea; thorax luteus; alæ lineis tribus angulosis fimbriaque luteis, lituris subtus nullis; antica linea interiore costaque luteis.*

*Acidalia phorcara*, Guen. *Phal.* i. 470, 791.

a, b. St. Domingo. From Mr. Tweedie's collection.

c. Jamaica. From Mr. Gosse's collection.

Group 4.

130. *ACIDALIA NYMPHIDIATA*.

*Fœm.* *Nivea; frons nigra; alæ lineis tribus aut quatuor parallelis remotis tremulis ferrugineo-fuscis, strigis nonnullis marginalibus nigricantibus vix conspicuis, puncto discali nigro.*

*Acidalia nymphidiata*, Guen. *Phal.* i. 473, 800.

Haiti.



## 131. ACIDALIA NELATA.

**Fœm.** *Pallide carneo-cinerea; frons nigra; alæ linea exteriorē indistincta nigro punctata subtilius magis conspicua, puncto discali parvo punctisque marginalibus minimis nigris; anticæ productæ; posticæ rotundatæ.*

*Acidalia nelata*, Guen. *Phal.* i. 484, 829.

Haiti.

## Group 5.

## 132. ACIDALIA MICRATA.

**Mas.** *Alba, minima; frons nigra; antennæ moniliformes, pubescentes; tibiæ posticæ longæ, incrassatæ; tarsi postici brevissimi; alæ anticæ conspersæ, spatiis basali et submarginali nigris; hoc lineam albam submarginalem includente, umbra media fuscescente vix conspicua, puncto discali minimo lunulisque marginalibus nigris; posticæ lineis tribus fuscescentibus vix conspicuis, puncto discali punctisque marginalibus duplicatis nigris.*

*Acidalia micrata*, Guen. *Phal.* i. 487, 837.

Haiti.

## Group 6.

## 133. ACIDALIA UMBILICATA.

*Oreo-nigra; caput nigrum, vertice niveo; alæ lineis tribus undulatis fuscescente-cinereis, 1a 2a que minus determinatis, puncto apicali nigro; anticæ puncto discali nigro. Mas.—Antennæ pubescentes; tibiæ posticæ incrassatæ non calcaratæ; tarsi postici brevissimi. Fœm.—Tibiæ posticæ bicalcaratæ.*

*Acidalia umbilicata*, Guen. *Phal.* i. 504, 872.

a, b. St. Domingo. From Mr. Tweedie's collection.

c. Jamaica. From Mr. Gosse's collection.

## 134. ACIDALIA BOTYDATA.

**Mas.** *Albida, gracilis; vertex niveus; tibiæ posticæ incrassatæ, non calcaratæ; tarsi postici brevissimi; antennæ ciliatæ, apices versus subciliatæ; abdomen longum; pedes longi,*

*graciles*; *alæ semihyalinae*, *lineis tribus undulatis cervinis*, *linea 4a diffusa angulosa*, *puncto discali nigro*; *antice acuta*, *costa cervina*. *Fœm.*—*Abdomen non elongatum*; *tibiæ posticæ graciles*, *bicalcaratæ*; *tarsi postici longi*.

*Male and female.* Whitish, slender. Vertex pure white. Antennæ rather broadly ciliated, except towards the tips, where they are very minutely ciliated. Abdomen long, extending somewhat beyond the hind wings. Legs long and slender; hind tibiæ incrassated, without spurs; hind tarsi very short. Wings semihyaline, thinly black-speckled, with three fawn-coloured lines; exterior line less undulating than the interior line, but more so than the submarginal line, between which and the exterior border there is another diffuse zigzag line; discal point black. Fore wings acute; costa fawn-coloured. *Female.*—Abdomen not extending beyond the hind wings. Hind tibiæ with two apical spurs. Length of the body 4—4½ lines; of the wings 9—11 lines. *a—c.* St. Domingo. From Mr. Tweedie's collection.

### Group 7.

#### 135. ACIDALIA SOLITARIA.

*Mas et fœm.* *Albido-cinerea*; *caput fuscescens*, *vertice albo*; *palpi breves*, *ascendentes*; *alæ fuscescente conspersæ*, *lineis tribus denticulatis diffusis cinereis*, *3a fusco punctata*, *puncto discali nigro*, *fimbria nigro punctata*. *Mas.*—*Antennæ pectinatae*; *tibiæ posticæ late fimbriatæ*, *basi penicillatæ*, *calcaribus nullis*; *tarsi postici breves*. *Fœm.*—*Tibiæ posticæ graciles*, *glabræ*, *quadricalcaratæ*.

*Male and female.* Whitish cinereous. Head mostly brownish; vertex white. Palpi short, ascending not rising higher than the vertex; third joint minute. Wings thickly and very minutely speckled with pale brown; three cinereous diffuse denticulated lines; exterior line more distinct than the others, and accompanied by brown points; discal point black; fringe with distinct black points. *Male.*—Antennæ pectinated for nearly two-thirds of the length from the base. Hind tibiæ broadly fringed, with a fan-shaped tuft at the base; spurs none; hind tarsi short. *Female.*—Hind tibiæ slender, smooth, with four long spurs. Length of the body 5 lines; of the wings 12—14 lines.

*a—c.* St. Domingo. From Mr. Tweedie's collection.

## South America.

Group 1, or the 7th European group.

Group 2, or the 12th European group.

Group 3, or the 13th European group.

Group 4, or the 14th European group.

Group 5, or the 16th European group.

Group 6, or the 17th European group.

Group 7, or the 18th European group.

Group 8, or the 19th European group.

Group 9. This group seems to be peculiar to South America, and is very different from the typical forms.

## Group 1.

## 136. ACIDALIA SUBQUADRATA.

**Mas et fœm.** *Osseo-alba; alæ puncto discali punctisque marginalibus nigris, margine exteriori flavescente-fusco; anticae lineis plurimis confusis flavescente-fuscis, litura apud angulum interiorem nigro-cinerea; posticae lineis duabus distinctis sinuatis flavescente-fuscis, umbra recta nigricante, margine exteriori angulato. Mas.—Antennæ pubescentes; tibiæ posticae incrassatae, albæ, non calcaratae.*

*Acidalia subquadrata, Guen. Phal. i. 459, 764.*

Brazil. Cayenne.

## 137. ACIDALIA EUPITHECIATA.

**Mas.** *Osseo-albida; alæ nigro subconspersæ; anticae productæ, extus saturatiores, linea exteriori arcuata, fasciculo apud angulum interiorem squamoso nigro-plumbeo, linea interiori subobsoleta, puncto discali nigro; posticae punctis marginalibus.*

*Acidalia eupitheciata, Guen. Phal. i. 461, 767.*

Brazil.

**Var.?** *Male.* Testaceous-cinereous. Front brown. Antennæ ciliated, minutely serrated. Middle femora and tibiæ fringed, the latter with very long spurs. Wings shining, slightly iridescent, thinly black-speckled, darker beyond the exterior line of the fore

wings, and especially so on the under side ; marginal points black, elongated ; fringe long and full. Fore wings with a black elongated discal point ; exterior line distinct ; interior line quite obsolete. Hind wings with the speckles confluent about the middle of the interior border. Length of the body  $2\frac{1}{2}$  lines ; of the wings 7 lines.

a. Ega. From Mr. Bates' collection.

### 138. ACIDALIA SPERNATA.

*Fœm. Testaceo-cinerea ; caput fuscum ; tibiæ posticæ bicalcarata ; alæ nigro subconspersæ, lineis duabus nigricantibus, 2a undulata, puncto discali punctisque marginalibus nigris.*

*Female.* Testaceous-cinereous. Head brown. Legs smooth ; hind tibiæ with two long apical spurs. Wings thinly and irregularly black-speckled ; interior and exterior lines blackish, slight, the latter undulating ; discal point black, distinct ; marginal points black, very small. Length of the body  $2\frac{1}{2}$  lines ; of the wings 9 lines.

a. Venezuela. From Mr. Dyson's collection.

*Var. β.* Testaceous-tinged. Wings with the lines here and there slightly angular. Hind wings with the exterior border more distinctly angular. *Female.*—Hind tibiæ with four long spurs. Fore wings with two cinereous spots on the outer side of the exterior line.

b—d. Honduras. From Mr. Dyson's collection.

### 139. ACIDALIA PRÆTEXTARIA.

*Fœm. Testaceo-flava ; alæ nitentes, spatio basali fasciæque latæ marginali nigricantibus, hac lineam submarginalem macularem testaceo-flavam includente, linea exteriori margineque exteriori parallelis, puncto discali nigro.*

*Acidalia prætextaria, Guen. Phal. i. 461, 768.*

Brazil.

## 140. ACIDALIA DEFIXARIA.

**Mas et fœm.** *Albida; caput nigricans, vertice albo; antennæ maris pubescentes; thorax antice fuscus; tibiæ posticæ maris incrassatæ, non calcaratæ; tarsi postici maris brevissimi; alæ nigro subconspersæ, lineis tribus cervinis indistinctis denticulatis, 2a nigro punctata, puncto discali punctisque marginalibus nigris; anticæ acutæ.*

*Male and female.* Whitish. Head blackish; vertex white. Antennæ of the male pubescent. Thorax brown in front. Hind tibiæ incrassated and without spurs in the male; slender and with four long spurs in the female. Hind tarsi of the male very short. Wings very minutely black-speckled; interior, exterior and sub-marginal lines fawn-colour, indistinct, denticulated; exterior line black-pointed; discal point black, distinct; marginal black points very minute. Fore wings acute; costa hardly convex; exterior border convex. Length of the body  $4\frac{1}{2}$  lines; of the wings 11 lines.

**α—g.** Venezuela. From Mr. Dyson's collection.

## 141. ACIDALIA INDOCTARIA.

**Mas.** *Albida; caput nigro-fuscum, vertice albo; antennæ pubescentes; thorax antice fusco submarginatus; tibiæ posticæ dilatatæ longissime penicillatæ, non calcaratæ; alæ amplæ, nigro subconspersæ, lineis interiore et exteriori cervinis, hac vix undulata costam versus subangulosa, linea marginali cervina, puncto discali punctisque marginalibus nigris minimis; anticæ acutæ, puncto apicali nigro. Var. β.—Alæ testaceo tinctæ, lineis subangulatis; posticæ margine exteriori angulato.*

*Male.* Whitish. Head blackish brown; vertex white. Thorax slightly fawn-colour in front. Antennæ pubescent. Hind tibiæ dilated, not spurred, with a long basal fan-shaped tuft. Wings ample, very minutely black-speckled; interior and exterior lines fawn-colour, the latter hardly undulating, slightly zigzag towards the costa; marginal line fawn-colour, very slight; discal point and marginal points black, very minute. Fore wings acute, with a distinct black apical point; costa straight; exterior border very slightly convex. Length of the body  $3\frac{1}{2}$  lines; of the wings 10 lines.

**α.** Venezuela. From Mr. Dyson's collection.

## 142. ACIDALIA DISCRIMINARIA.

**Mas.** *Albida; caput nigricans, vertice albo; antennæ subpubescentes; thorax antice cervinus; tibiæ posticæ incrassatæ, non calcaratæ; tarsi postici brevissimi; alæ nigro subconspersæ, lineis quatuor angulosis pallide cervinis, linea submarginali duplicata, puncto discali punctisque marginalibus nigris; anticæ vix acutæ.*

**Male.** Whitish. Head blackish; vertex white. Antennæ minutely pubescent. Thorax fawn-colour in front. Hind tibiæ incrassated, without spurs; hind tarsi very short. Wings very thinly and minutely black-speckled; interior, middle, exterior and submarginal lines zigzag, pale fawn-colour; submarginal line double, or divided by a zigzag whitish line; discal point and marginal point black, minute, but distinct; fringe long, full. Fore wings hardly acute; costa and exterior border almost straight. Length of the body  $3\frac{1}{2}$  lines; of the wings 10 lines.

**a.** Venezuela. From Mr. Dysou's collection.

## 143. ACIDALIA OBLIVIARIA.

**Mas.** *Pallide cinerea; caput obscure fuscum, vertice albo, antennæ dense pubescentes; thorax antice cervinus; tibiæ posticæ subdilatatæ, non calcaratæ; tarsi postici breves; alæ fuscescente subconspersæ; fasciis duabus pallide subcervinis, 2a marginali lineam angulosam albidam includente, linea submarginali angulosa pallide cervina, puncto discali lunulisque marginalibus fuscis; anticæ vix acutæ.*

**Male.** Pale cinereous. Head dark brown; vertex white. Antennæ thickly pubescent. Thorax fawn-colour in front. Hind tibiæ slightly dilated, without spurs; hind tarsi less than half the length of the tibiæ. Wings very minutely brownish speckled, with two pale dull fawn-coloured bands; the outer one marginal, intersected by a whitish zigzag line, and having near its inner side a zigzag pale fawn-coloured line; discal point and marginal lunules brown; fringe long and full. Fore wings hardly acute; costa and exterior border almost straight. Length of the body 4 lines; of the wings 10 lines.

**Brazil.** In Mr. Saunders' collection.

## 144. ACIDALIA CONFERTARIA.

**Mas.** *Subcervino-cinerea; vertex albus; antennæ pubescentes; tibiæ posticæ incrassatæ, non calcaratæ; tarsi postici breves; alæ nigro subconspersæ, lineis tribus cervinis undulatis plus minusve denticulatis, fascia marginali cervina lineam pallidam macularam includente, puncto discali punctisque marginalibus nigris; anticæ apice subrotundatæ, plagis duabus apud lineam exteriorem nigris.*

**Male.** Cinereous, with a slight fawn-coloured tinge. Vertex white. Antennæ pubescent. Hind tibiæ incrassated, without spurs; hind tarsi hardly half the length of the tibiæ. Wings minutely and irregularly black-speckled; interior, middle and exterior lines fawn-colour, undulating, more or less denticulated; marginal band fawn-colour, including a macular pale line; discal point and marginal points black, very distinct, the latter accompanied by very minute alternate black points; fringe full, double. Fore wings somewhat rounded at the tips; costa hardly convex; exterior border convex; two blackish patches on the exterior line, the hinder one near the interior angle. Length of the body 3 lines; of the wings 9 lines.

**Brazil.**

**a, b. Honduras.** From Mr. Dyson's collection.

## Group 2.

## 145. ACIDALIA APPARITARIA.

**Mas.** *Albido-cinerea; caput album; antennæ dense pubescentes; abdominis latera subfasciculata; tibiæ posticæ dilatatæ, non calcaratæ; tarsi postici sat breves; alæ nigro subconspersæ, lineis quatuor testaceis diffusis indistinctis subangulosis, linea submarginali duplicata, puncto discali punctisque marginalibus nigris; anticæ vix acutæ, puncto discali punctisque marginalibus nigris.*

**Male.** Whitish cinereous. Head white. Antennæ thickly pubescent. Abdomen with slight tufts along each side. Hind tibiæ dilated, without spurs; hind tarsi about half the length of the tibiæ. Wings thinly and minutely black-speckled; interior, middle, exterior and submarginal lines testaceous, diffuse, indistinct, slightly zigzag; submarginal line double; discal point and marginal points

black. Fore wings hardly acute, with a blackish mark by the costa; the latter and the exterior border slightly convex. Length of the 4 lines; of the wings 10 lines.

a. Honduras. From Mr. Dyson's collection.

### Group 3.

#### 146. ACIDALIA ASOPIATA.

Fœm. *Flavescente-alba; alæ angustæ, lineis tribus aut quatuor ferrugineo-flavis tremulis vix conspicuis, puncto discali punctisque marginalibus minimis nigris; anticæ productæ; posticæ breves, rotundatæ.*

*Acidalia asopiata*, Guen. *Phal.* i. 472, 798.

Cayenne.

#### 147. ACIDALIA FIGURINATA.

Var.? *Alba; caput nigrum; alæ lineis quatuor subundulatis pallide fuscis, la 3a que nigro punctatis, puncto discali punctisque marginalibus nigris, lituris subtus nullis.*

*Acidalia figurinata*, Guen. *Phal.* i. 473, 799.

Amazon Region.

a—c. Honduras. From Mr. Dyson's collection.

d. Venezuela. From Mr. Dyson's collection.

e. Brazil. From Mr. Mornay's collection.

#### 148. ACIDALIA EBURNEATA.

Fœm. *Nivea; frons fusca; alæ subrotundatæ, nigro subconspersæ, lineis fuscis interruptis aut punctularibus viz conspicuis, puncto discali punctisque marginalibus subtrigonis nigris.*

*Acidalia eburneata*, Guen. *Phal.* i. 474, 801.

Brazil.

#### 149. ACIDALIA MAPPATA.

Fœm. *Carneo-cinerea; frons nigra; alæ suboblongæ, lineis indistinctis, linea exteriori punctata, umbris marginalibus, puncto discali punctisque marginalibus nigris; anticæ acutæ, margine exteriori subflexo; posticæ breves, margine exteriori postico truncato.*

*Acidalia mappata*, Guen. *Phal.* i. 474, 802.

Brazil.



## 150. ACIDALIA SUBROSEATA.

**Mas.** *Pallide testaceo-cinerea; frons fusca; oculi magni; antennæ ciliis longissimis fasciculatis; tibiæ posticæ vix incrassatæ; alæ latæ, lineis indistinctis, linea exteriori tremula tenuissima sat distinctu, strigis marginalibus fuscis, puncto discali minimo; anticæ margine exteriori subconvexo, subtus vinoso-rosea; posticæ valde convexæ, angulo interiore quadrato.*

*Acidalia subroseata, Guen. Phal. i. 482, 823.*

Cayenne.

## 151. ACIDALIA TERMINATA.

**Mas.** *Fumoso-alba; antennæ pubescentes; alæ lineis tribus ferrugineo-flavis nigro atomaris, fimbria nigricante-rosea; anticæ costa nigricante-rosea; posticæ striga elevata discali ferrugineo-flava, macula subtus interiore e pilis erectis ochraceo-flavis.*

*Acidalia terminatata, Zeller, MSS. Guen. Phal. i. 483, 824.*

Colombia.

## 152. ACIDALIA RUBROCINCTATA.

**Mas.** *Osseo-alba; frons nigra; antennæ ciliis fasciculatis longissimis; tibiæ posticæ femoribus dimidio longiores; tarsi postici breves; alæ lineis undulatis indistinctis pallidissime fuscis, puncto discali punctisque marginalibus nigris, fimbria vinoso-rosea.*

*Acidalia rubrocinctata, Guen. Phal. i. 483, 825.*

Brazil.

## . 153. ACIDALIA VINOCINCTATA.

**Mas.** *Sordide alba; frons vinosa-fusca; tibiæ posticæ incrassatæ, femoribus dimidio longiores; tarsi postici brevissimi; alæ nigro conspersæ, punctis submarginalibus nigris, fimbria nigricante violaceo-rosea; anticæ macula discali ovata argillacea nigro atomaria; posticæ puncto discali.*

*Acidalia vinocinctata, Guen. Phal. i. 483, 826, pl. 15, f. 6.*

Brazil.

## 154. ACIDALIA USTARIA.

**Mas.** *Flavescente-cinerea; caput et thorax anticus ferrugineo-violacea; antennæ pubescentes; alæ nitentes, lineis duabus medianis parallelis fimbriaque saturatioribus, litura marginali ferrugineo-violacea; antica linea submarginali violacea strigibus notata.*

*Acidalia ustaria*, Guen. *Phal.* i. 484, 827.

Cayenne.

## 155. ACIDALIA MICACEATA.

**Mas.** *Testacea, nitens; caput supra saturate rufum; antennæ pubescentes, apices versus glabræ; tibiæ posticæ bicalcaratæ; alæ latiusculæ, chalybeo subulosæ, lineis undulatis fuscis; antica quadrilineatæ, striga apud angulum interiorem nigricante; posticæ bilineatæ.*

Closely allied to *A. ustaria*. **Male.** Testaceous, shining. Vertex and front deep red. Palpi hardly ascending, not extending beyond the head, deep red above. Antennæ pubescent, smooth for more than one-third of the length from the tips. Abdomen not extending beyond the hind wings. Hind tibiæ with apical spur. Wings rather broad, adorned with chalybeous atoms, which are most prevalent on the costa of the fore wings; four undulating brown (here and there blackish) lines, two of which are obsolete on the hind wings; a brown marginal line, interrupted opposite the veins. Fore wings with a blackish streak by the interior angle; costa blackish. Length of the body  $3\frac{1}{2}$  lines; of the wings 8 lines.

This seems to be nearly allied to *A. ustaria*, but in the description of that species no mention is made of metallic spangles on the wings.

a. Venezuela. From Mr. Dyson's collection.

## 156. ACIDALIA DELOTARIA.

**Fœm.** *Testacea; thorax rufo-fasciatus; alæ marginibus, antica fasciis tribus costaque, posticæ fascia unica rufis.*

*Hæmala delotaria* (*Geometra tenuis*, *Sphecodes colorata*), Hübn. *Zutr. Samml. Exot. Schm.* ii. 11, 118, f. 235, 236.

*Acidalia delotaria*, Guen. *Phal.* i. 484, 828.

Surinam.

## 157. ACIDALIA EXPOLITATA.

**Mas.** *Margaritaceo-cinerea; frons nigro-fusca; antennæ vix pubescentes; tibiæ posticæ incrassatæ, planæ; tarsi postici brevissimi; alæ subopalinæ, lineæ submarginali serpentina nigro-fusca, maculis marginalibus cervinis, fimbria violaceo-micante; antica lineæ media serpentina nigro-fusca, striga discali; postica arcu punctoque discalibus.*

*Acidalia expolitata, Guen. Phal. i. 484, 830.*

**Cayenne.**

## Group 4.

## 158. ACIDALIA ABORNATA.

**Mas.** *Subflavescente-alba; frons olivaceo-fusca; antennæ dentatæ, pubescentes; tibiæ posticæ dilatatæ, non calcaratæ, femoribus duplo longiores; alæ sericeæ, lineæ denticulata exteriori maculisque submarginalibus inæqualibus pallide olivaceis, lineæ media vix conspicua, puncto discali olivaceo, punctis marginalibus nigris.*

*Acidalia abornata, Guen. Phal. i. 486, 836.*

**Brazil.**

## Group 5.

## 159. ACIDALIA ASTHENARIA.

**Mas.** *Pallide cinerea, gracilis; caput cervinum, vertice albo; antennæ subpectinatæ, apices versus simplices; tibiæ posticæ bicalcaratæ, non incrassatæ, lineis tribus albidis indistinctis vix denticulatis, lineæ marginali pallide fusca, puncto discali punctisque marginalibus nullis; antica vix acutæ; postica angulo interiore quadrato.*

**Male.** Pale cinereous, slender. Head fawn-colour; vertex white. Antennæ slightly pectinated to much beyond half the length. Hind tibiæ not incrassated, with two long apical spurs. Wings whitish speckled, with three whitish indistinct hardly denticulated lines; marginal line pale brown, festooned; discal point and marginal points quite obsolete. Fore wings hardly acute; costa and exterior border nearly straight. Hind wings with the interior angle subquadrate. Length of the body  $3\frac{1}{2}$  lines; of the wings 8 lines.

This may be a species of *Asthenæ*.

*a—d. Venezuela. From Mr. Dyson's collection.*

## 160. ACIDALIA PRIVATA.

**Fœm.** *Alba; caput nigro-fuscum; thorax antice fusco marginatus; tibiæ posticæ quadricaratae; alæ angustæ, nigro conspersæ, fascia submarginali cinerea puncta nigra lineamque albam subangulosam includente, fascia media angustiore minus obliqua, puncto discali nullo, lunulis marginalibus nigris; anticæ apice subrotundatæ, lituris costalibus subapicalibus obliquis nigris.*

Nearly allied to *A. impropria*. *Female.* White. Head blackish brown. Thorax brownish in front. Hind tibiæ with four long spurs. Wings narrow, minutely black-speckled; submarginal band cinereous, containing elongated black points on the veins and a slightly zigzag white line; middle band cinereous, more slender, less distinct and oblique than the submarginal band; discal point obsolete; marginal lunules black. Fore wings somewhat rounded at the tips; costa with some oblique subapical black marks; exterior border straight, very oblique. Length of the body 3 lines; of the wings 10 lines.

*a, b.* Venezuela. From Mr. Dyson's collection.

## 161. ACIDALIA IMPROPRIA.

**Fœm.** *Alba; caput nigro-fuscum; thorax antice cervinus; tibiæ posticæ quadricaratae; alæ nitentes, longiusculæ, sat angustæ, nigricante conspersæ, lineis tribus denticulatis fuscescent-cinereis, puncto discali punctisque marginalibus elongatis nigris; anticæ lanceolatæ, peracute.*

*Female.* White. Head blackish brown. Thorax fawn-colour in front. Hind tibiæ with four long spurs. Wings rather long and narrow, shining, with minute blackish speckles; middle, exterior and submarginal lines denticulated, pale brownish cinereous; discal point and marginal points black, the latter elongated. Fore wings lanceolate, very acute; costa and exterior border straight, the latter very oblique. Length of the body 3 lines; of the wings 9 lines.

*a, b.* Venezuela. From Mr. Dyson's collection.

## Group 6.

## 162. ACIDALIA XANTHOCEPHALATA.

Mas et fœm. *Sordide flavescens-alba; caput ochraceo-flavum; alæ lineis duabus parallelis subflexis pallidissime fuscis; antica linea tertia, margine exteriori subconvexo. Mas.—Antennæ pubescentes; tibiæ posticæ incrassatæ, planæ, fusiformes, non calcaratæ, femoribus dimidio longiores; tarsi postici brevissimi.*

*Acidalia xanthocephalata*, Guen. *Phal.* i. 503, 869.

Brazil.

Rio Janeiro. In Mr. Fry's collection.

## 163. ACIDALIA NAPARIATA.

Mas et fœm. *Sordide flavescens-alba; frons nigra; alæ nigro conspersæ, lineis tribus aut quatuor pallidissime fuscis, 3a 4aque approximatis undulatis, puncto discali punctisque marginalibus duplicatis nigris. Mas.—Tibiæ posticæ incrassatæ, fusiformes, fasciculatæ, non calcaratæ; tarsi postici brevissimi.*

*Acidalia napariata*, Guen. *Phal.* i. 503, 870.

Brazil.

## 164. ACIDALIA AMAZONATA.

Mas. *Sordide flavescens-alba; frons nigra; alæ latæ, lineis pallidissime fuscis, puncto discali minimo punctisque marginalibus nigris; antica brevis, margine exteriori subrecto; postica subdilatata, margine exteriori subflexo, angulo interiore acuto.*

*Acidalia Amazonata*, Guen. *Phal.* i. 503, 871.

Amazon Region.

## Group 7.

## 165. ACIDALIA DISMUTATA.

Mas. *Testaceo-alba; frons nigra; antennæ dentatæ, fasciculato ciliatæ; alæ roseo subinctæ, linea exteriori obscuriore sinuata*

*nigro punctata, umbra media, puncto discali punctisque marginalibus duplicatis nigris; antica acutæ, umbra media sinuata lineaque exteriori parallelis, margine exteriori recta; postica margine exteriori angulato.*

*Acidalia dismutata*, Guen. *Phal.* i. 509, 884.

Brazil.

#### 166. ACIDALIA CHILENSIS.

*Fœm. Carneo-alba; tibiæ posticæ quadricaratae; alæ nigro subconspersæ, lineis duabus parallelis denticulatis pallide fuscis; antica linea interiori arcuata, puncto discali nigro, margine exteriori subrecto; posticæ rotundata.*

*Acidalia Chilensis*, Blanchard. Guen. *Phal.* i. 509, 885.

Chili.

#### 167. ACIDALIA CENOPODIATA.

*Mas. Sordide carneo-albida; frons supra ferrugineo-fusca; tibiæ posticæ incrassatae, sericeæ, planæ, pilis vinoso-rufis; alæ rufescente fusco conspersæ, lineis media et exteriori parallelis tremulis pallide fuscis; antica linea interiori arcuata bisinuata, margine exteriori vix convexo; posticæ rotundata, angulo interiori quadrato.*

*Acidalia cœnopodiata*, Guen. *Phal.* i. 509, 886.

Brazil.

#### Group 8.

#### 168. ACIDALIA LATARIA.

*Mas. — Ochraceo-cinerea; caput cervinum; antennæ subpubescentes, subsetulosæ; thorax antice cervinus, tegulis fuscis; abdomen longiusculum, apice fuscum; tibiæ posticæ incrassatae, calcaribus quatuor parvis; alæ amplæ, fusco transversa conspersæ, lineis tribus cervinis subundulatis, linea 3a nigro punctata, fascia exteriori fuscescente subtus purpureo-fusca magis conspicua, punctis marginalibus nigris; antica acutæ; posticæ gutta discali nigra, margine exteriori subangulato.*  
*Fœm. ? — Alæ fascia supra vix conspicua subtus lutescente.*

*Male.* Cinereous, ochraceous-tinged. Head fawn-colour. Antennæ minutely pubescent and setulose. Thorax fawn-colour in front; tegulæ mostly brown. Abdomen rather long; apical tuft

**brown.** Hind tibiæ moderately incrassated, with four short spurs. Wings ample, slightly iridescent, transversely brown-speckled; interior, middle and exterior lines fawn-colour, slightly undulating; exterior line accompanied by black points, and having a brownish band along its outer side; this band is more distinct and of a dark purplish brown hue on the under side; marginal points black. Fore wings acute; blackish marks along the costa transverse and more distinct than those elsewhere. Hind wings with a black discal dot; exterior border slightly angular in the middle. Length of the body 5 lines; of the wings 12 lines.

**a. Santarem.** From Mr. Bates' collection.

*Female ?* Wings with the band almost obsolete above, dull pale luteous on the under side.

**b. Venezuela.** From Mr. Dyson's collection.

#### 169. ACIDALIA SUFFUNDARIA.

**Mas.** *Subtestaceo-albida, subtus ex parte ochracea; antennæ subpubescentes; thorax antice ochraceo marginatus; tibiæ posticæ incrassatæ, calcuribus quatuor parvis; tarsi postici brevissimi; alæ amplæ, lineis subobsoletis, puncto discali punctisque marginalibus fuscis, lineis duabus fasciæque submarginali subtus purpurascente-fuscis; anticæ acutæ, costa nigricante notata, fimbria purpurascente-fusca.*

**Male.** Whitish, with a slight testaceous tinge. Head, fore border of the thorax, legs and wings beneath towards the base and along the costa ochraceous. Antennæ minutely pubescent. Hind tibiæ incrassated, with four short spurs; hind tarsi less than one-third of the length of the tibiæ. Wings ample; lines almost obsolete; discal points and elongated marginal points brown; under side transversely brown-speckled, with a purplish brown submarginal band, and with the middle and exterior lines of the same hue, but very incomplete. Fore wings acute, with some blackish marks along the costa; exterior border straight; fringe purplish brown, except towards the interior angle. Length of the body  $4\frac{1}{2}$  lines; of the wings 11 lines.

**a. Honduras.** From Mr. Dyson's collection.

## Group 9.

## 170. ACIDALIA JUSTATA.

**Fœm.** *Lutea; caput rufescens; antennæ pubescentes; pedes postici brevissimi, tibiis fimbriatis; alæ lineis exteriori et submarginali rufis undulatis dentatis, puncto discali albo, rufo marginato; anticæ linea interiore flexa.*

**Female.** Luteous, red-speckled, paler beneath. Head reddish. Antennæ pubescent. Anterior legs long; middle tibiæ with two long apical spurs. Hind femora and hind tibiæ very short, the latter fringed; hind tarsi extremely short. Wings with the exterior and submarginal lines red, undulating, dentate; marginal festoon red; discal point white, red-bordered. Fore wings with an interior bent line. Length of the body  $3\frac{1}{2}$  lines; of the wings 11 lines.

Rio Janeiro. In Mr. Fry's collection.

## 171. ACIDALIA EXPRESSARIA.

**Mas.** *Ochracea; vertex albus; antennæ pectinatæ; alæ flavescens, lineis plurimis ochraceis angulosis, linea media purpurascens recta diffusa, puncto discali punctisque marginalibus nigris; anticæ vix acutæ, costa purpurascens lituris flavescens.*

**Male.** Ochraceous, paler beneath. Vertex white. Antennæ moderately pectinated. Abdomen and hind legs wanting. Wings yellowish, moderately broad, with many zigzag ochraceous lines; middle line more distinct and oblique, purplish, straight, diffuse; discal point and marginal points black, the latter rather large. Fore wings hardly acute; costa purplish, with the exception of some yellowish marks. Length of the body 3? lines; of the wings 9 lines.

a. Honduras. From Mr. Dyson's collection.

## 172. ACIDALIA? RESCINDARIA.

**Mas.** *Cinerea; caput fuscum; antennæ setulosæ; thorax anticæ fusco marginatus; alæ nigro subconspersæ, lineis quatuor pallide subcervinis latis indistinctis, linea marginali obscure fusca, puncto discali nullo; anticæ apice subacutæ, apud costam ferrugineæ.*



**Male.** Cinereous. Head and fore border of the thorax brown. Antennæ setulose. Abdomen and hind legs wanting. Wings moderately broad, slightly black-speckled; interior, middle, exterior and submarginal lines pale dull fawn-colour, broad, indistinct; marginal line dark brown; fringe long, full; discal point obsolete. Fore wings ferruginous along the costa, slightly acute at the tips; exterior border rather oblique. Length of the body 3? lines; of the wings 9 lines.

**a. Venezuela.** From Mr. Dyson's collection.

### Africa.

Group 1, or the 3rd European group.

Group 2, or the 7th European group.

Group 3, or the 12th European group.

Group 4, or the 13th European group.

Group 5, or the 15th European group.

Group 6, or the 18th European group.

### Group 1.

#### 173. ACIDALIA NUMIDARIA.

*Flavo-aurata*; alæ flavo-ochraceæ, lineis tribus undulatis fimbriaque rufescentibus.

*Acidalia numidaria*, Lucas, *Expl. Scient. Alger.* iii. 395, 141, pl. 4, f. 2. Guen. *Phal.* i. 449, 740.

Constantina.

### Group 2.

#### 174. ACIDALIA STRIGULIFERA.

**Mas.** Testaceo-cinerea; frons nigricans; antennæ dense pubescentes; tibiæ posticæ dilatatæ, non calcaratæ; tarsi postici breves; alæ nigro subconspectæ, lineis tribus testaceis indistinctis subangulosis, la 3a que nigro punctatis, puncto discali punctisque marginalibus nigris; anticæ acutæ, linea exteriori postice nigra fuscoque extus nebulosa, margine exteriori subflexo; posticæ margine exteriori sat flexo.

**Male.** Testaceous-cinereous. Head blackish in front. Antennæ thickly pubescent. Hind tibiæ dilated, without spurs; hind

tarsi less than half the length of the hind tibiæ. Wings thinly and minutely black-speckled; interior, middle and exterior lines testaceous, indistinct, slightly zigzag; interior and exterior lines accompanied by black points; discal point and marginal points black, the former much larger than the latter. Fore wings acute; exterior line black and shaded on the outer side with brown towards the interior angle; costa slightly convex; exterior border slightly bent in the middle. Hind wings with the exterior border more distinctly bent than that of the fore wings. Length of the body 5 lines; of the wings 12 lines.

a. Port Natal. From M. Gueinzus' collection.

### 175. ACIDALIA SPOLIATA.

**Mas.** *Pallide testaceo-cinerea; caput nigricans, vertice pallido; antennæ pubescentes; tibiæ posticæ subdilatatae, subciliata, non calcaratae; tarsi postici longiusculi; alæ nigro conspersæ, lineis tribus testaceis angulosis indistinctis, linea exterior nigro punctata, puncto discali punctisque marginalibus nigris; antica vix acuta, margine exteriori perobliqua.*

**Male.** Pale testaceous-cinereous. Head blackish, excepting the vertex. Antennæ pubescent. Hind tibiæ slightly dilated and fringed, without spurs; hind tarsi much more than half the length of the hind tibiæ. Wings minutely and rather thickly black-speckled; interior, middle and exterior lines testaceous, indistinct, zigzag; exterior line accompanied by black points; discal point and marginal points black. Fore wings hardly acute; costa and exterior border very slightly convex, the latter very oblique. Length of the body 5 lines; of the wings 14 lines.

a. South Africa. Presented by Sir A. Smith.

### Group 3.

### 176. ACIDALIA LACTARIA.

**Mas et fœm.** *Osseo-alba; caput nigricans, vertice pallido; antennæ maris pubescentes; tibiæ posticæ quadricalcaratae; alæ non conspersæ, lineis quinque testaceis parallelis subundulatis, puncto discali punctisque marginalibus nigris parvis; antica apice rotundata.*

*Male and female.* Osseous-white. Head blackish, excepting the vertex. Antennæ of the male pubescent. Hind tibiæ of the female with four long spurs. Wings not speckled, with five parallel slightly undulating testaceous lines; discal point and marginal points black, minute; fringe long and full. Fore wings rounded at the tips; costa straight; exterior border slightly convex. Length of the body 3—3½ lines; of the wings 9—10 lines.

*a—c.* Sierra Leone. From Mr. Foxcroft's collection.

*d.* Congo. Presented by Sir J. Richardson.

#### 177. ACIDALIA INTERVULSATA.

*Albido-cinerea; caput nigro-fuscum, vertice albo; tibiæ posticæ quadricalcaratæ; alæ nigro subconspersæ, lineis quinque indistinctis angulosis pallide cervinis, 5a duplicata, puncto discali punctisque marginalibus nigris; anticæ acutæ, margine exterioro recto perobliquo.*

*Female.* Whitish cinereous. Head blackish brown; vertex white. Hind tibiæ with four long spurs. Wings thinly and minutely black-speckled, with five indistinct zigzag pale fawn-coloured lines; the fifth between the submarginal line and the border; discal point and marginal points black. Fore wings acute; costa and exterior border straight, the latter very oblique. Length of the body 3 lines; of the wings 9 lines.

*a.* Sierra Leone. Presented by the Rev. D. F. Morgan.

#### Group 4.

#### 178. ACIDALIA CONSENTANEA.

*Mas. Fuscescente-cinerea; caput nigricans; antennæ pubescentes; tibiæ posticæ subdilatatæ, non calcaratæ; tarsi postici longiusculi; alæ sat angustæ, nigro conspersæ, lineis quatuor subobscurioribus indistinctis angulosis, puncto discali punctisque marginalibus nigris.*

*Male.* Brownish cinereous. Head blackish. Antennæ pubescent. Hind tibiæ slightly dilated, without spurs; hind tarsi much more than half the length of the tibiæ. Wings rather narrow, minutely and rather thickly black-speckled; interior, middle, exterior and submarginal lines indistinct, zigzag, a little darker than the ground-hue; discal point and marginal points black, the former rather larger than the latter; costa straight; exterior border

rather oblique, slightly convex. Length of the body 3 lines; of the wings 9 lines.

a. Cape. Presented by Dr. A. Smith.

#### 179. ACIDALIA INTERNATARIA.

**Fœm.** *Pallide cinerea, testaceo subtineta; frons nigra; tibiæ posticæ quadricalcaratæ; alæ nigro subconspersæ, lineis tribus testaceis angulosis indistinctis, linea submarginali duplicata, puncto discali punctisque marginalibus nigris, illo elongato; anticæ acutæ, margine exteriori sat obliquo.*

*Female.* Pale cinereous, with a slight testaceous tinge. Head black in front. Hind tibiæ with four long spurs. Wings very minutely black-speckled; interior, middle, exterior and the double submarginal line testaceous, zigzag, indistinct; discal point and marginal points black, the former elongated. Fore wings acute; costa and exterior border hardly convex, the latter rather oblique. Length of the body 4 lines; of the wings 10 lines.

a. Congo. Presented by Sir J. Richardson.

#### Group 5.

#### 180. ACIDALIA ACCENTURIATA.

**Mas et fœm.** *Cinerascens; frons nigra; alæ nigro conspersæ; anticæ lineis quatuor undulatis nigris ochraceo diffusè marginatis; posticæ lineis duabus. Mas.—Tibiæ posticæ incrassatæ, albæ, non calcaratæ.*

*Acidalia accenturiata, Guen. Phal. i. 490, 846.*

Cape.

#### Group 6.

#### 181. ACIDALIA HECTATA.

**Mas et fœm.** *Pallide testaceo-cinerea; frons nigra; alæ lineis media et exteriori dentatis saturate cinereis, spatio adhuc exteriori obscuriore lineam submarginalem submacularem testaceo-cineream includente, puncto discali punctisque marginalibus nigris; anticæ linea interiore dentata, margine exteriori*

*subconvexo ; posticæ angulo dentiformi. Mas.—Tibiæ posticæ vix incrassatæ, non calcaratæ ; tarsi postici tibiis non breviores.*

*Acidalia hectata, Guen. Phal. i. 506, 877.*

Cape.

#### 182. ACIDALIA INTERNATA.

*Mas. Pallide stramineo-cinerea ; frons nigra ; antennæ subdentatæ, breviter pubescentes ; alæ lineis undulatis paullo saturatioribus, macula postica exteriori pallidissime ferrugineo-rufa, puncto discali punctisque marginalibus duplicatis nigris ; anticæ margine exteriori convexo ; posticæ margine exteriori angulato.*

*Acidalia internata, Guen. Phal. i. 506, 878.*

Namaqua Region.

#### Madagascar, &c.

Group 1. Peculiar to Madagascar.

Group 2, or the 13th European group.

#### Group 1.

#### 183. ACIDALIA LOPHOPTERATA.

*Mas. Carneocinerea ; antennæ filiformes ; tibiæ posticæ longæ, quadricarcatæ, non incrassatæ ; alæ latæ, integræ, spissæ, lineis duabus medianis nigris, puncto discali punctisque submarginalibus et marginalibus nigris ; anticæ macula discali velutina ; posticæ fasciculo costali ochraceo.*

*Acidalia lophopterata, Guen. Phal. i. 470, 792.*

Madagascar.

#### Group 2.

#### 184. ACIDALIA LUCULATA.

*Mas et scem. Ochraceo-alba ; alæ umbra media, lineis exterioribus vix conspicuis ferrugineo-fuscis, puncto discali punctisque marginalibus nigris, margine exteriori subdentato. Mas.—Tibiæ posticæ albæ, fusiformes, subincrassatæ.*

*Acidalia luculata, Guen. Phal. i. 472, 797.*

Isle Bourbon.

## 185. ACIDALIA MINORATA.

*Albida ; alæ basi subcinereæ, umbra media, lineis submarginalibus cinereis, puncto discali nigro, lineis duabus subtus cineris parallelis.*

*Acidalia minorata, Boisd. Faun. Mad. 115.*

*Acidalia mauritiata, Guen. Phal. i. 476, 809.*

*Mauritius.*

## Hindostan and Ceylon.

Group 1, or the 6th European group.

Group 2, or the 7th European group.

Group 3, or the 12th European group.

Group 4, or the 13th European group.

Group 5, or the 15th European group.

Group 6, or the 18th European group.

Group 7, or the 19th European group.

## Group 1.

## 186. ACIDALIA REMOTATA.

*Mas. Pallidissime ochraceo-cinerea ; frons fusca ; antennæ ciliis sat longis ; tibiæ posticæ albæ, subincrassatæ ; tarsi postici ochracei, tibiis vix breviores ; alæ nigro conspersæ, puncto discali punctisque marginalibus nigris, linea interiore umbraque media conspicuis, linea exteriori tenui tremula, umbris duabus submarginalibus.*

*Acidalia remotata, Guen. Phal. i. 458, 762.*

*North Hindostan.*

## Group 2.

## 187. ACIDALIA LIGATARIA.

*Mas. Ossea ; caput nigricans ; antennæ setulosæ ; thorax anticæ fuscus ; tibiæ posticæ dilatatæ, non calcaratæ ; tarsi postici breves ; alæ non conspersæ, lineis tribus cinereis denticulatis indistinctis, linea 3a ex parte nigra et denticulata, plagis adhuc exterioribus fuscescentibus, fascia marginali subcinerea lineam pallidam angulosam includente, puncto discali punctisque marginalibus nigris, fimbria nigro punctata ; anticæ acutæ, lineâ interiore vix conspicua nigro tripunctata ; posticæ margine exteriori angulato.*

**Male.** Bone-colour. Head blackish. Antennæ setulose. Thorax brown in front. Hind tibiæ dilated, without spurs; hind tarsi less than half the length of the tibiæ. Wings not speckled; middle, exterior and submarginal line cinereous, denticulated, indistinct; submarginal line partly black and dilated, with some brownish patches along its outer side; marginal space somewhat cinereous, intersected by a pale zigzag line; discal point and marginal lunules black; fringe with minute blackish points. Fore wings acute; costa and exterior border nearly straight; interior line very indistinct, but indicated by three black points. Hind wings with the exterior border angular. Length of the body 4 lines; of the wings 12 lines.

a. Hindostan. From Archdeacon Clerk's collection.

b. North Hindostan. From Mr. Stevens' collection.

c. Ceylon. Presented by Dr. Templeton.

#### 188. ACIDALIA ADDICTARIA.

**Mas.** *Osseo-albida; caput nigrum, vertice albo; thorax antice subcervinus; tibiæ posticæ incrassatæ, non calcaratæ; alæ fusco pallido subconspersæ, lineis interiore et media testaceis subundulatis valde indistinctis, linea exteriori magis conspicua subundulata, puncto discali lunulisque marginalibus nigris; anticæ maculis duabus submarginalibus nigricantibus; posticæ margine exteriori subflexo.*

**Male.** Bone-white. Head black above; vertex white. Antennæ rather stout, with short cilæ. Thorax with a fawn-coloured tinge in front. Hind tibiæ incrassated, fringed, without spurs; hind tarsi about one-third of the length of the tibiæ. Wings thinly speckled with pale brown; interior and middle lines testaceous, slightly undulating, very indistinct; exterior line more distinct, slightly undulating; discal point black, much smaller in the fore wings than in the hind wings; marginal festoon black. Fore wings very acute; exterior line black and thick alongside of two blackish submarginal spots, curved inward towards the costa; exterior border hardly convex. Hind wings with the exterior border very slightly bent; interior angle prominent. Length of the body 4 lines; of the wings 10 lines.

a. Colombo, Ceylon. From M. Dohrn's collection.

## 189. ACIDALIA CÆSARIA.

**Mas.** *Albido-testacea, sat valida; palpi porrecti, brevissimi, gracillimi; caput antice nigricans; vertex albus; antennæ pubescentes; tibiæ posticæ bicalcaratæ; alæ lineis tribus purpurascentibus denticulatis, 3a diffusa, margine exteriori fimbriaque purpurascentibus, puncto discali nigricante.*

**Male.** Whitish testaceous, rather stout. Palpi porrect, very short and slender. Head blackish in front; vertex and antennæ white, the latter pubescent. Hind tibiæ with two long apical spurs. Wings with the interior, exterior and submarginal lines purplish, denticulated; submarginal diffuse, extending nearly to the purplish exterior border; fringe also purplish; discal point blackish. Length of the body  $2\frac{1}{2}$  lines; of the wings 6 lines.

*a—e.* Colombo, Ceylon. From M. Dohrn's collection.

## Group 3.

## 190. ACIDALIA ACTIOSARIA.

**Fœm.** *Subcervino-cinerea; frons fusca; tibiæ posticæ calcaribus duobus parvis; alæ fusco conspersæ, lineis media et exteriori obscurioribus subundulatis subdenticulatis, linea submarginali diffusa duplicata, puncto discali nigro; posticæ angulo interiore rotundato.*

**Female.** Cinereous, with a slight fawn-coloured tinge. Front brown. Legs slender, rather long; hind tibiæ with two short apical spurs. Wings brown-speckled: middle and exterior lines slightly undulating and denticulated, more distinct beneath than above, as is also the double diffuse submarginal line; discal point black. Fore wings acute; interior line indistinct; costa and exterior border very slightly convex. Hind wings with the interior angle somewhat rounded. Length of the body  $2\frac{1}{2}$  lines; of the wings 8 lines.

*a.* Ceylon. Presented by Dr. Templeton.

## 191. ACIDALIA NESCIARIA.

**Fœm.** *Pallide cinerea, sat robusta; caput nigrum; palpi ascendentes, minimi; tibiæ posticæ quadricalcaratæ; alæ nigro subconsersæ, puncto discali punctisque marginalibus atris, lineis tribus cinereis dentatis diffusis indistinctis; anticæ acutæ; posticæ angulo interiore quadrato.*



*Female.* Pale cinereous, rather stout. Head black. Palpi ascending, very small. Hind tibiæ with four spurs. Wings very minutely black-speckled; discal point and marginal points deep black; interior, exterior and submarginal lines cinereous, dentate, diffuse, indistinct. Fore wings acute. Hind wings with the interior angle quadrate, prominent. Length of the body 4 lines; of the wings 10 lines.

*a.* Colombo, Ceylon. From M. Dohrn's collection.

### 192. ACIDALIA EMISSARIA.

*Fœm.* *Pallide cinerea; caput antice nigricans; antennæ submoniliformes; alæ lanceolata, nigricante conspersa, linea media fusca diffusa perobliqua, lineis exterioribus et submarginalibus fuscis denticulatis, hac subobsoleta, puncto discali punctisque marginalibus nigris; anticæ peracutæ; posticæ margine exteriori subtruncato.*

*Female.* Pale cinereous. Head blackish in front. Antennæ submoniliform. Abdomen extending a little beyond the hind wings. Hind tibiæ with four approximate spurs. Wings long, narrow, blackish speckled; middle line brown, diffuse, extremely oblique; exterior line and submarginal line brown, denticulated, the latter very indistinct; discal point and marginal points black. Fore wings very acute; exterior border very oblique. Hind wings with the exterior border slightly truncated. Length of the body 3 lines; of the wings 9 lines.

*a.* Hindostan. From Archdeacon Clerk's collection.

### 193. ACIDALIA NEGATARIA.

*Mas et fœm.* *Sordide cinereo-albida; caput nigricans, vertice albo; palpi brevissimi, gracillimi; antennæ maris pubescentes; tibiæ posticæ quadricaratae; alæ latiusculæ, nigro subconspersæ, puncto discali punctisque marginalibus nigris, lineis media et exteriori cinereis subrectis valde indistinctis, hac punctata.*

*Male and female.* Dingy cinereous whitish. Head blackish; vertex white. Palpi very short and slender. Antennæ of the male pubescent. Hind tibiæ with four long spurs. Wings rather broad, very minutely black-speckled; discal point and marginal points

black; middle line and exterior lines cinereous, nearly straight, very indistinct, the latter accompanied by points. Fore wings acute. Hind wings extending very little beyond the abdomen; interior angle prominent. Length of the body  $3\frac{1}{2}$  lines; of the wings 9 lines.

a—c. Colombo, Ceylon. From M. Dohrn's collection.

#### 194. ACIDALIA ACTUARIA.

Mas et fœm. *Ouseo-albida; caput nigricans, vertice niveo; ala nigro subconspersa, lineis tribus subdenticulatis pallide subtestaceis, 3a submarginali duplicata, puncto discali punctisque marginalibus nigris; antica acuta, costa margineque vix convexis; postica margine exteriore convexo, angulo interiore bene determinato. Mas.—Antennæ pubescente-ciliatæ; tibia postica albæ, incrassatæ, non calcaratæ; tarsi postici breves.*

*Male and female.* Bone-colour. Head blackish; vertex pure white. Antennæ of the male with pubescent ciliæ. Thorax fawn-colour in front. Hind tibiæ of the male white, incrassated; hind tarsi about one-third of the length of the tibiæ. Wings very thinly black-speckled; middle, exterior and the double submarginal line pale dull testaceous, slightly denticulated; discal point and marginal points black. Fore wings acute; costa and exterior border hardly convex. Hind wings with the exterior border convex; interior angle prominent. Length of the body  $3\frac{1}{2}$  lines; of the wings 9 lines.

a—f. Colombo, Ceylon. From M. Dohrn's collection.

#### Group 4.

#### 195. ACIDALIA DEFAMATARIA.

Fœm. *Pallide cinereo-cervina; frons fusca, vertice albido; ala longæ, angustæ, fusco subconspersæ, lineis quinque obscurioribus denticulatis valde indistinctis, punctis marginalibus fuscis; antica acutissimæ, margine exteriore perobliquo, puncto discali parvo; postica puncto discali mediocri, margine exteriore postico subtruncato.*

*Female.* Pale cinereous fawn-colour. Front brown; vertex whitish. Thorax fawn-colour in front. Hind tibiæ with four long spurs. Wings long, narrow, minutely brown-speckled; interior, middle, exterior and two submarginal lines denticulated, very indis-

tinged, a little darker than the ground-colour; discal point black, larger in the hind wings than in the fore wings; marginal points brown, very minute. Fore wings very acute; exterior border very oblique. Hind wings with the hind part of the exterior border somewhat truncated; interior angle prominent. Length of the body 3 lines; of the wings 10 lines.

*a, b.* Ceylon. Presented by Dr. Templeton.

#### 196. ACIDALIA ADEPTARIA.

*Mas et fœm. Cinereo-alba, minima; caput antice nigricans; antennæ maris pubescentes; tibiæ posticæ quadricaratae; alæ fusco conspersæ, puncto discali punctisque marginalibus nigris, lineis tribus fuscis subdentatis, 3a diffusa.*

*Male and female.* Cinereous-white, very small. Head blackish in front. Antennæ of the male pubescent. Hind tibiæ with four spurs. Wings thickly brown-speckled; discal point and marginal points black; interior, exterior and submarginal lines brown, slightly dentate; submarginal line more diffuse than the others. Fore wings somewhat rounded at the tips. Length of the body 2 lines; of the wings 6 lines.

*a—f.* Colombo, Ceylon. From M. Dohrn's collection.

#### Group 5.

#### 197. ACIDALIA FIBULATA.

*Mas et fœm. Cinerascens; frons nigra; alæ nigro conspersæ; anticæ lineis quatuor undulatis nigricantibus ochraceo diffuse marginatis; posticæ umbra media lineaque submarginali. Mas.—Tibiæ posticæ albæ, incrassatæ, calcaribus nullis.*

*Acidalia fibulata, Guen. Phal. i. 490, 844, pl. 15, f. 5.*

Ceylon.

#### Group 6.

#### 198. ACIDALIA NICTATA.

*Mas. Sordide flavescens-alba; alæ lineis pallide fuscis; anticæ acutæ, margine exteriori convexo; posticæ margine exteriori angulato.*

*Acidalia nictata, Guen. Phal. i. 506, 876.*

North Hindostan.

## Group 7.

## 199. ACIDALIA ATTENTATA.

**Fœm.** *Ossea; caput fuscum, vertice albo; tibiæ posticæ quadricalcaratæ; alæ nigro subconspersæ, lineis tribus cinereis angulosis valde indistinctis, linea submarginali subobsoleta, puncto discali punctisque marginalibus nigris; anticæ acutæ posticæ margine exteriori subangulato.*

**Female.** Bone-colour. Head brown; vertex white. Hind tibiæ with four long spurs. Wings very thinly and minutely black-speckled; middle, exterior and submarginal lines cinereous, zigzag, very indistinct; submarginal line nearly obsolete; discal point and marginal points black. Fore wings acute; costa and exterior border almost straight. Hind wings with the exterior border slightly angular in the middle. Length of the body  $3\frac{1}{2}$  ? lines, of the wings 10 lines.

**a.** Hindostan. From Archdeacon Clerk's collection.

## 200. ACIDALIA ? CONTIGARIA.

**Fœm.** *Ossea; caput fuscum; palpi subangulati, caput paullo superantes; tibiæ posticæ quadricalcaratæ; alæ amplæ, nigro subconspersæ, linea exteriori fusca denticulata vix conspicua nigricante punctata, fascia adhuc exteriori fuscescente valde diffusa, linea submarginali fusca subobsoleta, punctis marginalibus nigris; anticæ peracutæ, costa convexa; posticæ lineæ media fusca distincta subrecta.*

**Female.** Bone-colour. Head brown. Palpi extending a little beyond the head, slightly angular; third joint a little more than half the length of the second. Hind tibiæ with four long spurs. Wings very ample, slightly and minutely black-speckled; exterior line brown, denticulated, mostly obsolete, but indicated by blackish points, having along its outer side a very diffuse brownish band; submarginal line brown, nearly obsolete; marginal points black, somewhat elongated in the hind wings. Fore wings very acute; costa convex; exterior border straight, rather oblique; interior and middle lines nearly obsolete. Hind wings with the middle line brown, distinct, nearly straight. Length of the body 6 ? lines; of the wings 20 lines.

**a.** North Hindostan. From the Entomological Society's collection.

## Group 8.

## 201. ACIDALIA OBTURBATA.

**Mas.** *Testacea; caput fuscum, vertice albo; antennæ breves, setulosæ; tibiæ posticæ subincrassatæ, non calcaratæ; tarsi postici breviusculi; alæ nigro subconspersæ, lineis duabus fasciæque lata marginali purpurascens, linea 1a diffusa subdenticulata, 2a denticulata, fascia lineam testaceam includente puncto discali punctisque marginalibus nigris.*

**Male.** Testaceous. Head brown; vertex white. Antennæ short, stout, setulose. Hind tibiæ slightly incrassated, without spurs; hind tarsi full half the length of the tibiæ. Wings minutely black-speckled; middle and exterior lines and a broad marginal band purplish; middle line mostly diffuse, slightly denticulated, more oblique than the exterior line, which is regularly denticulated; marginal band slightly interlined with testaceous; discal point and marginal points black. Fore wings acute; exterior border rather oblique. Length of the body 3 lines; of the wings 9 lines.

**a.** Ceylon. Presented by Dr Templeton.

## 202. ACIDALIA INAMATA.

**Fœm.** *Testacea, sat valida; caput ferrugineo-fuscum; palpi ascendentes, brevissimi; pectus album; tibiæ posticæ quadricarcatæ; alæ amplæ, fusco subconspersæ, linea recta obliqua pallide lutea, fimbria chalybea; anticæ peracutæ, costa ferruginea; posticæ latissimæ.*

**Female.** Testaceous, rather stout. Head ferruginous-brown. Palpi ascending, applied to the head, not rising higher than the front. Pectus white. Hind tibiæ with four long spurs. Wings ample, thinly brown-speckled, with a straight pale luteous line, which extends from four-fifths of the length of the costa of the fore wings to three-fourths of the length of the interior border of the hind wings; exterior border pale luteous; fringe metallic-blue. Fore wings very acute; costa straight, ferruginous; exterior border hardly convex, moderately oblique. Hind wings very broad; exterior border hardly bent in the middle. Length of the body 6? lines; of the wings 16 lines.

**a.** Ceylon. Presented by Dr. Templeton.





